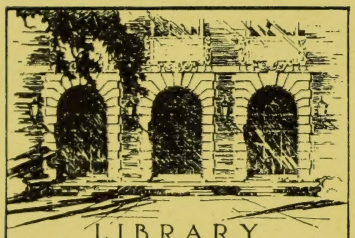

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Charles C. Caveny
Dean

YOUR UNIVERSITY

The Chicago Undergraduate Division of the University is entering its seventh school year. Since October, 1946, this two-year branch of the University of Illinois has offered a well-rounded educational program to thousands of students who found it to their advantage to live in the Chicago metropolitan area while attending college.

Complete pre-professional freshman and sophomore courses of study are offered in the College of Liberal Arts and Sciences with a three year curriculum for pre-medical students. Professional two-year curricula are available in the College of Commerce and Business Administration, and the College of Engineering. In addition, architecture and architectural engineering curricula, as a part of the College of Fine and Applied Arts, are offered under the administration of the College of Engineering.

Professional curricula in physical education, teacher training, and a program leading to a Bachelor of Science degree in nursing are also available. The basic course and the first year of the advanced course in ROTC have been established for men students.

Students enrolled at the Chicago Undergraduate Division have the same status as students matriculating on the Urbana campus. Courses of instruction, the schedule of fees, and admission requirements are the same

on both campuses. Students completing the curricula at the Chicago Undergraduate Division are given priority in completing their work for degrees on the Urbana campus.

Excellent instructional facilities are provided in the school's 68 classrooms and 33 modern, fully-equipped laboratories. A 55,000-volume library, food service, well-furnished lounges, and recreational facilities supplement the academic program. A large gymnasium adjacent to the Pier houses the athletic program.

As an important part of the services of the Student Counseling Bureau, educational and vocational guidance examinations are offered to prospective students. Counseling services of the Bureau, as well as the facilities of the offices of the Dean of Students and his assistants, the Dean of Men and Dean of Women, are available to students at all times.

The Chicago Undergraduate Division, through its educational, social, and cultural program, strives to provide its student body with the same high degree of service which has been so long a part of University of Illinois tradition.

ADMISSION

There are Seven Steps

In order to become a student at the Chicago Undergraduate Division of the University of Illinois, an applicant must take the following steps:

1. *Obtain an application for admission.* The Office of Admissions and Records of the Chicago Undergraduate Division will be glad to provide application blanks for admission in response to requests received by mail, by telephone, or in person.

2. *Provide the Office of Admissions and Records with an official transcript of his record in high school and his record at each college or institution of higher education which he has attended since leaving high school.* These records must be forwarded directly to the Office of Admissions and Records, University of Illinois, Chicago Undergraduate Division, Navy Pier, Chicago 11, by an official of the school concerned.

The applicant must make his own arrangements to have his transcripts forwarded to this office as soon as possible to permit an early evaluation of his credentials.

In addition, applicants who have been on active duty in the Armed Forces must also submit photostatic copies of their service separation papers.

3. *Decide which college and curriculum in the University he desires to enter.* To assist applicants in making this decision, this division of the University offers Vocational and Educational Guidance Examinations which are followed by professional counseling. For new freshmen, these guidance examinations are a required activity of the orientation period. However, since the time available for counseling during the orientation period is extremely limited, these examinations are now being offered several months in advance. Appointment requests for these examinations may be made through the Office of Admissions and Records at the time an application blank is obtained. If the applicant has any question whatsoever as to the course of study he desires to pursue in college, the University strongly urges him to take these tests and receive counseling well in advance of the orientation period.

4. *Complete and return the application blank.*

5. When an applicant's case is complete, that is, after his completed application blank and all necessary supporting records and transcripts have been received, the case will be evaluated. If the application is approved, the applicant will be sent a permit to enter, an appointment for such placement, guidance, and motor fitness tests as may be necessary, an appointment for a physical examination, and information as to the date and place of his college meeting and of registration. If the application is not approved, the Office of Admissions and Records will send the applicant written notice of this action, explain his deficiencies, and make suggestions as to the manner in which he may remove them and qualify for admission.

6. *Report to Navy Pier for physical examination, college meeting, and tests listed in paragraph 5 above, on the dates specified in the notice which the applicant has received.*

7. *Register, pay tuition and fees, and start classes.*

Harold E. Temmer,
Examiner and Recorder

ADMISSION REQUIREMENTS

For Admission Without Entrance Examinations (by certificate)

I. HIGH SCHOOL GRADUATES

There are two definite sets of requirements both of which must be met by all students: first, general University admission requirements described in "A" below; and, second, specific subjects required for the college, and curriculum of the student's choice as listed in the chart on pages 7 and 8.

A. General University admission requirements:

1. Graduation from an accredited high school.

2. Age.—An applicant must be at least sixteen years of age. The dean of the college concerned, however, may admit, on petition, a student fifteen years of age who meets all other requirements for admission and who is to reside while attending the University with his parents or guardian or with someone selected by them.

3. Fifteen units of acceptable secondary school work distributed as follows:

    a. A minimum of nine units of work in the academic fields (English, mathematics, sciences, foreign languages, history, and social studies) including:

        (1) At least three units of English.

        (2) At least two majors (including English) and one minor selected from the list of acceptable majors and minors on page 9. *Exception:* The requirement of a second major is waived for applicants who rank in the upper half of their class scholastically on graduation.

    b. Six units from any of the high school subjects which are accepted by an accredited school toward its diploma and which meet University of Illinois accrediting standards.

B. College Subject Requirements.—Applicants must present credit in the subjects required for admission to the college and curriculum of their choice (See Chart page 7 and 8).

Checking records with the Office of Admissions and Records

Required and Recommended Subjects for Specific Colleges and Curricula

Colleges	*Subjects required for admission*	*Subjects recommended for admission*
COLLEGE OF COMMERCE All Fields (Accountancy, Banking and Finance, Commerce and Law, Commercial Teaching, Economics, Industrial Administration, Management, Marketing, Public Affairs, Secretarial Training).	English, 3 units. Algebra, 1 unit. Geometry, 1 unit.	Advanced Algebra, ½ unit. Science, 2 units (including 1 unit with laboratory).
COLLEGE OF ENGINEERING All Curricula (Aeronautical, Agricultural, Ceramic, Civil, Electrical, General, Mechanical, Metallurgical, Mining, Engineering Physics).	English, 3 units. Algebra, 1½ units. Plane Geometry, 1 unit. Solid Geometry, ½ unit. (See Paragraph 3, page 8.)	Language, 2 units. Science, 2 units (including physics or chemistry or both). Social Studies, 2 units. Industrial Arts, 2 units.
Curricula in Architecture: Design Option (for B.S. degree in Architecture); Construction Option (for B.S. degree in Architectural Engineering).	English, 3 units. Algebra, 1½ units. Geometry, 1 unit. (See Paragraph 3, page 8.)	Freehand Drawing, 1 unit. Science, 2 units (including physics and chemistry). Social Studies, 2 units (including economics and history).
COLLEGE OF LIBERAL ARTS AND SCIENCES General Curriculum with majors in Bacteriology, Botany, Economics, English, French, Geography, Geology, German, History, Philosophy, Political Science, Psychology, Sociology, Spanish, Speech, Zoology. General Curriculum preparatory to Education, Journalism, Law. Teacher-training Curricula (Not requiring Chemistry, Physics, or Mathematics).	English, 3 units. Language, 2 units.[1] See paragraph 2, page 8.)	Language, 3 units in one language, instead of the required 2 units. Science, 2 units (including biology). Social Studies, 2 units.
General Curriculum with majors in Chemistry, Physics, Mathematics, Physiology. Special Curricula preparatory to Dentistry, Medicine, Veterinary Medicine, Nursing. Teacher-training Curricula (Requiring Chemistry, Physics, and Mathematics).	English, 3 units. Language, 2 units.[1] (See paragraph 2, page 8.) Algebra, 1 unit. Geometry, 1 unit.	Mathematics, 3 units, instead of the required 2 units. Science, 2 units (including physics or chemistry or both). Social Studies, 2 units.

[1]Foreign language requirement is waived for students who rank in the upper half of their high school graduating class.

Colleges	*Subjects required for admission*	*Additional Subjects recommended for admission*
Special Curricula in Chemistry and Chemical Engineering.	English, 3 units. Language, 2 units.[1] (See paragraph 2, page 8.) Algebra, 1½ units. Geometry, 1 unit. (See paragraph 3, page 8.)	Language, 4 units (including 2 units in French and 2 units in German). Mathematics, 3 units, instead of the required 2½ units. Science, 2 units (including physics or chemistry or both). Social Studies, 2 units.
Elementary Education Curriculum.	English, 3 units.	Science, 2 units (including physics or chemistry or both). Social Studies, 2 units. Algebra, 1 unit. Geometry, 1 unit.
PHYSICAL EDUCATION Curriculum for Men and Curriculum for Women.	English, 3 units. Written approval of the Director of Physical Education.	Science, 3 units (including biology). Social Studies, 2 units. Health and safety education, and participation in school programs of physical education and athletics.

[1]See footnote page 6.

ADMISSION TO THE COLLEGE OF ENGINEERING BEGINNING SEPTEMBER, 1953

For students entering the College of Engineering in September, 1953, and thereafter, the mathematics requirement for admission to full freshman standing will be as follows: algebra, 2 units; plane geometry, 1 unit; solid geometry, ½ unit; trigonometry, ½ unit.

Students who present only one unit in algebra and one unit in geometry, and who meet all other requirements, may be admitted on the condition that the deficiencies be removed during their first year of residence, and with the understanding they can not complete the requirements for a degree in the College of Engineering in eight semesters.

Students who do not present the four units in mathematics as specified may be admitted to full standing by passing a proficiency examination at the University which will indicate their preparation is adequate for entrance into analytical geometry.

ACCEPTABLE MAJORS AND MINORS

Definitions:

Unit.—A *unit* is the equivalent of two high school credits; i.e., it is the value given to a course of study covering two semesters and including not less than the equivalent of 120 sixty minute periods of class room work. Two hours of work requiring little or no preparation outside the class are considered as equivalent to one hour of prepared classroom work. Fractional credits of the value of less than one-half unit will not be accepted. Not less than one unit of work will be accepted in a foreign language, elementary algebra, plane geometry, physics, chemistry, or biology.

Major.—A *major* consists of three unit courses in one academic field.

Minor.—A *minor* consists of two unit courses in one academic field.

Please note that the University's definition of a *major* and a *minor* is probably not the same as that in use in your high school.

The required majors and minor as defined may be selected only from the following five academic fields:

(1) English—In all cases one major must be in English. Only courses in history and appreciation of literature, and in composition (including oral composition when given as a part of a basic English course) and grammar, will count toward this major. Four units in English, while not required for any curriculum, are recommended by all the colleges.

(2) Foreign Language—Three units in one language constitute a major. Two units in one language constitute a minor. The acceptable foreign languages are: German, French, Spanish, Italian, Latin, and Classical Greek. Less than one unit in a language is not acceptable for admission.

(3) Mathematics—Only courses in algebra, plane geometry, solid and spherical geometry, and trigonometry will be accepted toward a major or a minor in this subject. (General mathematics may be accepted in lieu of algebra and geometry in cases in which the content of the course is essentially the same as that ordinarily included in algebra and geometry. However, essentials of mathematics, business or shop mathematics, and commercial arithmetic are not acceptable toward a major or minor in mathematics.), In Engineering, and in the chemistry and chemical engineering curricula of L.A.S., where advanced algebra or solid

geometry, or both, are required, students who have only one unit in algebra and one unit in geometry, and who meet all other entrance requirements, may be admitted on condition that the deficiency be removed during their first year of residence.

(4) Science—Including physics; chemistry; biology, or botany and zoology; general science, or physiology and physiography; astronomy; and geology. The three units required for a major must include at least a total of two units chosen from one or more of the following subjects: physics, chemistry, botany, and zoology. Biology may be offered in place of botany or zoology. The two units required for a minor must include at least one unit from the above subjects.

(5) Social Studies—This field is divided into two areas:

a. History, e.g., United States, modern, ancient, and medieval, etc.

b. General Social Studies—civics, economics, commercial or economic geography, and sociology.

Three units required for a major must include at least two units in history. The two units required for a minor must include at least one unit of history.

II. TRANSFER STUDENTS

A. All requirements listed in Item I, page 5. *Exceptions:* An applicant who is transferring from an institution rated as Class "A" by the University and who is deficient in the admission requirements listed in Item I may be admitted if he presents at least 30 semester hours of credit in transfer with a 3.00 average ("C") and without any failures in any college subject. However, such applicants who desire to enter either the College of Commerce and Business Administration or the College of Engineering must present credit in the minimum mathematics required for these colleges.

B. Honorable dismissal from all institutions of higher learning previously attended, and a collegiate scholastic average of at least 3.00 ("C") in terms of the University of Illinois grading system. *Exception:* An applicant whose record at some other institution comes within either of the following classifications may enter the University only on approval of the dean of the college concerned and under the conditions imposed by him:

1. An applicant on probation at, or dropped from, another institution for poor scholarship or for disciplinary reasons. (In the latter instance, he must also obtain the approval of the University Senate Committee on Student Discipline.)

2. A person whose collegiate scholastic average is less than 3.00 in terms of the University of Illinois grading system.

III. NON-RESIDENT APPLICANTS

Applicants who are not residents of the State of Illinois may be admitted (if vacancies exist after all qualified resident applicants have been accommodated) provided they meet all requirements listed in Item I, page 5, and further provided that:

A. As high school graduates they ranked scholastically in the top three-quarters of their class on graduation.

B. As transfer students they present a collegiate scholastic average of at least 3.0 ("C") in terms of the University of Illinois grading system.

IV. SPECIAL SCHOLASTIC ADMISSION REQUIREMENTS

A. High school graduates who are residents of the State of Illinois and who rank in the fourth (lowest) quarter of their class scholastically on graduation, if otherwise qualified, will be admitted on scholastic probation.

B. Applicants for the following special curricula must meet the scholastic minima indicated opposite each curriculum.

Curriculum	Scholastic Requirements
1. Pre-Medical	
a. High school graduates	Rank in upper half of graduating class.
b. Transfer students	3.5 collegiate average through the third semester of collegiate work. 3.75 collegiate average commencing with the fourth semester of college work.
2. Pre-Dental, Pre-Veterinary Medicine	
a. High school graduates	Rank in upper half of graduating class.
b. Transfer students	Collegiate average of 3.5.

ADMISSION BY EXAMINATION

Applicants who do not meet the requirements for admission listed above may qualify for admission by passing one or more examinations as outlined below: (*Exception:* This section does not apply to applicants who are deficient in the scholastic admission requirements outlined in Items III and IV, page 11. Scholastic deficiencies may not be removed by examination—only by an improved scholastic record.)

University of Illinois Entrance Examinations

Applicants who may be classified in any of the following categories may qualify for admission by passing University of Illinois entrance examinations as indicated under each category:

A. Graduates of Unaccredited High Schools:

1. Applicants who rank in the top twenty-five per cent of their graduating class from an unaccredited secondary school which offers four years of instruction may qualify by passing an entrance examination in English composition and rhetoric and such other entrance examinations in high school subjects as may be necessary to complete admission requirements.

2. Applicants who are graduates of unaccredited secondary schools and rank below the top twenty-five per cent of their graduating class may qualify by passing entrance examinations for a minimum of fifteen units of secondary credit, including all courses necessary to meet University and curricular admission requirements.

B. Applicants who have attended an accredited high school, but who have not been graduated, may qualify by passing an entrance examination in English composition and rhetoric and additional entrance examinations for a total of at least four units of work in subjects to be designated by the University.

C. Applicants who have not completed any secondary school work may qualify by passing University of Illinois entrance examinations in all high school subjects necessary to meet general University and specific college admission requirements.

D. Applicants who do not meet University admission requirements with respect to any one or more of the following:

Total units of credit
Total academic units
Major and minors
Subjects required for admission to the college of the applicants' choice

may qualify by passing University of Illinois entrance examinations in the subjects in which they are deficient

General Educational Development Tests

United States Armed Forces Institute General Educational Development Tests.—Veterans of active duty with the United States Armed Forces or with the United States Maritime Service and adult non-veterans (non-veterans 21 years of age or older) may qualify for admission to the University by passing the USAFI General Educational Development Tests under the following conditions:

A. Applicants seeking admission to the College of Liberal Arts and Sciences may qualify if their G.E.D. test scores are sufficiently high to entitle them to a scholastic rank equivalent to that of a student who has been graduated in the upper half of his class in an accredited

Stop for supplies at the Bookstore

secondary school. Applicants, whose G.E.D. scores are passing but below minimum required for upper-half classification scholastically, may qualify if they present credit from accredited sources in two successive years of an acceptable foreign language. *Exception:* Applicants desiring to enter specialized curricula in Liberal Arts and Sciences for which mathematics is required (see pages 7 and 8) may not qualify by G.E.D. tests alone, but must present credit from accredited sources in elementary algebra and plane geometry.

B. Applicants seeking admission to the College of Commerce and Business Administration or the College of Engineering may qualify by passing the G.E.D. tests and presenting credit from accredited sources in the required mathematics.

C. Applicants seeking admission to the Physical Education curricula may qualify by passing the G.E.D. tests and securing the approval of the Director of Physical Education.

FEES

TUITION—Illinois residents (except those holding scholarships) registering in nine semester hours or more pay a tuition fee of.... $40.00
Non-residents registering in nine semester hours or more pay a tuition fee of 150.00
Students taking eight semester hours or less pay $3 per semester hour if residents of Illinois, or $10 per semester hour if non-residents.

HOSPITAL AND MEDICAL SERVICE FEE—All students registering in six semester hours or more pay as insurance for hospital and medical service a fee of..... 5.00

LABORATORY, LIBRARY, AND SUPPLY FEE—All students registering in nine semester hours or more pay a laboratory, library, and supply fee of 8.00
Students taking less than this amount of instruction pay $4 each semester.

STUDENT ACTIVITIES FEE—All students registering in six semester hours or more pay a student activities fee of..... 6.00

DEPOSITS—Each student must make a deposit of $5 at the time of his first registration. An additional deposit of $10 ($15 in all) is required of students withdrawing military equipment. Chargeable against these deposits are such items as unreturned towels and locks, lost library books,

library fines, shortages in laboratory, military, and other equipment, etc. Whenever the amount of the $5 deposit fall belows $2.50 or the amount of the $15 deposits falls below $12.50, the student will be required immediately by additional deposit to bring the total up to $5 and $15, respectively. Any balance in deposit will be returned, after the end of the semester, to the student in case he officially withdraws from the University. The $10 military deposit will be returned to the student, upon receipt of the military equipment, at the end of each school year.

IDENTIFICATION CARD—Each student, on payment of tuition and fees each semester, is given an identification card for use in obtaining loans of library books, locks, towels, and other equipment.

Fees for the Summer Session

TUITION—Illinois residents (except those holding scholarships) registering in five semester hours or more pay a tuition fee of.....$20.00
Non-residents registering in five semester hours or more pay a tuition fee of..... 75.00
Students taking four semester hours or less pay $3 per semester hour if residents of Illinois, or $10.00 per semester hour if non-residents.

HOSPITAL AND MEDICAL SERVICE FEES—All students registering in four semester hours or more pay as insurance for hospital and medical service a fee of..... 2.50

LABORATORY, LIBRARY, AND SUPPLY FEE—All students registering in five semester hours or more pay a laboratory, library, and supply fee of..... 4.00
Students taking less than this amount of instruction pay $2 for the summer session.

STUDENT ACTIVITIES FEE—All students registering in four semester hours or more pay a student activities fee of..... 3.00

All fees listed above are due and payable in full when the student registers.

Refunds of Fees

In case a student withdraws from the University[1] during the first ten days of instruction, the total amount of his tuition and fees will be re-

[1]Students leaving the University before the end of a semester or session should initiate withdrawal papers at the office of the dean of their college. Failure to do so will result in the student being dropped for poor scholarship at the end of the semester.

funded. After ten days and before the middle of the semester, a rebate of one-half the tuition and fees will be made. After the middle of the semester, no rebate will be allowed. In the summer term, the total amount of the tuition and fees paid will be refunded if withdrawal occurs within the first five days; one-half the amount after the first five days but within the first four weeks; and nothing after the beginning of the fifth week. If a student withdraws from one or more courses thereby reducing his study load to eight or less semester hours in the regular semester or four or less hours in the summer session, a pro rata refund or tuition and fees will be made according to the rebate schedule.

Miscellaneous Fees

SERVICE CHARGE FOR DEFERRED FEES—A service charge of ten percent of the amount of fees deferred, but not to exceed $3 a semester, is assessed for the privilege of deferring fees, and this charge must be paid on the day of registration. If deferred fees are paid within ten days after registration, the service charge is refunded *except* that a minimum service charge of $1 is retained by the University in all cases. The general deposit of $5 (if this deposit has not previously been paid), the service charge, and all charges from previous semesters must be paid on the day of registration. Arrangements for deferred fees are made directly with the cashier.

CHANGE FEE—For every change slip issued later than noon of the second Monday following registration the fee is..... $1.00

TRANSCRIPT FEE—Each student who has paid all his University fees is entitled to receive, without charge, one transcript of his record. For each additional transcript the fee is..... .50

LATE REGISTRATION FEE—Former students who register after the regular registration days in either semester pay a late registration fee of 5.00

SPECIAL EXAMINATION FEE—For any special examination to remove a failure the fee is..... 5.00

FEE TO AUDIT COURSES—Persons not connected with the University who attend classes as listeners pay for each course..... 7.50

VETERANS' REGISTRATION INFORMATION

Veterans may qualify for admission to the Chicago Undergraduate Division under the regular entrance requirements listed on pages 3 to 13. Honorable discharge papers and credentials showing special training courses completed while in the Armed Forces should accompany high school and college credentials at the time of application. These credentials should be sent to the Office of Admissions and Records, University of Illinois, Undergraduate Division, Navy Pier, Chicago 11, Illinois, for evaluation.

Veterans Eligible for the G.I. Bill

Veterans discharged on or before July 25, 1947, must have been registered in some type of training under the G.I. Bill for the entire regular term preceding their transfer to the University of Illinois, if they wish their benefits transferred to this school. These veterans are required to register under their G.I. Bill without interruption each regular semester since July 25, 1947, if they wish to retain their eligibility.

Application for a Certificate of Eligibility to attend a new institution must be submitted to the Veterans Administration prior to termination of training at the institution last attended. Veterans Administration approval for a change of course within an institution or upon transfer to another institution must be secured prior to the end of the last semester under the former course. Regulations permit no more than two changes of course while in training under the G. I. Bill. The second change is possible only if recommended as the result of advisement and guidance tests administered by the Veterans Administration. Subsequent requests may be approved only for courses of less than thirty weeks duration leading to employment in critical occupations. Once a veteran has failed to comply with requirements governing changes of course or institution, it is not possible for him to receive further benefits. Veterans who have last used their G. I. Bill for correspondence work may not change to resident training in the same course, but only to more advanced instruction by correspondence.

Only eligible veterans initially discharged after July 25, 1947, and veterans who enlisted or re-enlisted between October 6, 1945, and October 5, 1946, under Public Law 190 (the Voluntary Recruitment Act of 1945) may initiate their training after July 25, 1951. These veterans

must be registered under the G. I. Bill four years from the date of their first discharge after July 25, 1947, and they must re-register under the Bill continuously thereafter to retain their eligibility.

Veterans re-called to active duty before their G. I. Bill deadline date may be allowed to resume training within a reasonable period following their discharge, provided former progress had been satisfactory. It is not possible, however, to initiate training after the deadline if the G. I. Bill has never been used. The Veterans Administration Regional Office will determine eligibility on an individual basis.

Procedure for Registration Under the G.I. Bill

1. Obtain a valid Certificate of Eligibility from the Veterans Administration, 366 West Adams Street, Chicago. A copy of discharge papers must accompany this application. A Certificate to be used in this University must show the name of the University and the name of the course in which the veteran will register.
2. Keep the Certificate until the day of registration for classes. It will not be accepted before that time.
3. Bring the form and $5.00 for the general deposit fee to registration. Books and supplies will be furnished.

Previous Training Under the G.I. Bill

Those veterans previously registered at another school under the G. I. Bill and who conform to the requirements mentioned above should:

1. Obtain a notice of termination of training (V. A. form 7-1905e) from the former school prior to the termination of their training in that school.
2. Present this form at once to the Veterans Administration, 366 West Adams Street, Chicago. It is an application for a supplemental Certificate of Eligibility.

PUBLIC LAW 16

Students receiving educational benefits under the national Vocational Rehabilitation Act should be certain that there is an authorization on file for them at the University by the time they are to register. Early notification of intention to enter training should be given to the Veterans Administration Training Officer.

TRANSFERS FROM URBANA OR GALESBURG

Students previously registered under a Certificate of Eligibility on the Urbana campus and who wish to transfer to the Chicago Undergraduate Division will be eligible to continue training under the G. I. Bill only if they were registered in Urbana under the Bill for the entire semester immediately preceding the transfer. They may use the same Certificate only if they intend to register at the Undergraduate Division in the same course as that in progress in Urbana. If a veteran intends to enroll in a different course at Navy Pier, he must apply for a new Certificate of Eligibility prior to the end of his last semester in Urbana.

Those students transferring to the Chicago Undergraduate Division from the Urbana campus are responsible for requesting the transfer of their Certificates or Letters of Eligibility to Navy Pier; they are not transferred with academic records. To request a transfer of these records, notify Mr. E. T. Sanford, Division of Special Services for War Veterans, 258 Administration Building (West), Urbana, Illinois.

Veterans who were last registered under the G. I. Bill at the Galesburg Division and who, in accord with the provisions outlined above, are still eligible for benefits should also send a written request for transfer of records to the above address. All files are now in the Urbana office.

Veterans who have attended either Urbana or Galesburg under Public Law 16 must also notify their Training Officer of their intention to transfer to the Chicago Undergraduate Division.

VETERANS WHO HAVE NOT OBTAINED AN AUTHORIZATION

Veterans who do not have an authorization for training from the Veterans Administration at the time of registration will be required to pay tuition and fees and to buy all necessary books and equipment. A refund will be made when the authorization is presented to the University. Information concerning education under the G. I. Bill or Public Law 16 is available from the Office of Admissions and Records, Room 15, Window E.

MILITARY SCHOLARSHIPS

Veterans not eligible for the G. I. Bill may be eligible for the State Military Scholarship. Any person who served in the armed forces dur-

ing World War I or any time between September 16, 1940, and the official termination of the present national emergency and received an honorable discharge may qualify for this four-year tuition scholarship if he was a resident of Illinois or a student in the University at the time of entering service. No examination or minimum grade average is required. Information and application blanks are available from the Office of Admissions and Records, room 15, window E.

STUDENT WELFARE

The University's interest in the individual student extends beyond the class room to include each student's personal adjustment to college life. To this end, the University provides a broad program of educational, vocational, and personal counseling, instruction in healthful living, and extracurricular activities, both social and cultural.

Aid in adjustment to college life begins before the student enrolls at the Chicago Undergraduate Division, with the services of the Student Counseling Bureau available to prospective students seeking help in planning their college careers. New students have an opportunity to meet the deans and directors at a special meeting at the start of each semester.

Dr. Paul C. Greene, Director of the Student Counseling Bureau, advising student on program

STUDENT COUNSELING BUREAU

The purpose of the Student Counseling Bureau is to help prospective, present and former students in making college and vocational plans, and in making the fullest use of resources of the University for meeting their individual needs.

High school seniors, in the second semester of their senior program, as well as high school graduates and entering freshmen are urged to take advantage of aptitude testing and of individual counseling *before* entering the University. These services are available if requested through high school counselors and the Office of Admissions and Records.

The Bureau's facilities are available at all times to students at the Undergraduate Division.

On the basis of information obtained from interviews and scientific tests of aptitude, achievement, interest and personality, these counselors help the student answer questions such as: Do I have the necessary aptitudes, interests, and personality characteristics for the course of study and for the vocation I am considering? What is the probable demand for workers in the vocation I am planning to enter? What grades should I expect to earn at the University? How can I improve my concentration, and speed up my reading ability?

In addition to such vocational and educational questions, the Bureau also provides counseling services for all types of personal and psychological questions such as overcoming fear of examinations, speech problems, and lack of friends, and needs for increased personal effectiveness.

All the following services are important aspects of the Student Counseling Bureau's work with students.

Freshman Guidance Testing
Individual Testing
Reading and Study Skills Counseling
Occupational Information
Selection of College Majors
Personal Problems Counseling

University students can make an appointment for the suggested types of services at the Bureau's reception desk in room 300. High school seniors and graduates should make requests for services through the Office of Admissions and Records.

Counseling facilities of the offices of the Dean of Students, the Dean of Men, the Dean of Women, and the Student Counseling Bureau are available to students at all times during their college work at the Chicago Undergraduate Division. Students are urged to discuss specific educational problems with their instructors. Members of the instructional staff hold weekly office hours for conferences with individual students.

DEAN OF STUDENTS

The Dean of Students is in charge of most matters of student welfare and extracurricular activities. As part of his organization the Director of Health Services, the Dean of Men, the Dean of Women, and their assistants are advisors to whom students may turn for assistance and advice. Details of these counseling services are given in the following sections.

In addition, the Dean of Students is the administrative officer responsible for all extracurricular activities and is charged with the co-ordination of the extracurricular programs of the recognized student clubs and organizations. The Faculty Committee on Student Affairs serves in an advisory capacity to the Dean of Students in extracurricular matters. He is also advisor to foreign students at the Chicago Undergraduate Division.

In connection with the responsibility for student welfare, the Dean of Students is authorized to attend sessions of the Disciplinary Committee, but has no vote.

DEAN OF MEN

The Office of the Dean of Men is organized for the primary purpose of aiding men students. The work of the Dean of Men is in counseling students and advising them on any matters which they wish to bring to him. He is available for individual conferences with students daily.

The Dean of Men takes an active part in student extracurricular affairs through his assignments as the secretary of the Faculty Committee of Student Affairs, chairman of the Finance Committee for Student Organizations and secretary of the Student Organizations Fund. He also serves as adviser to Phi Eta Sigma, national scholastic honorary for first-year men students, and as secretary to the Parents Association.

The Student Employment Division which assists needy students with contacts for part-time employment and the Hospital and Medical Service plan are under the supervision of the Dean of Men. Attendance records for both veteran and non-veteran students are maintained by the Office of the Dean of Men.

DEAN OF WOMEN

The Office of the Dean of Women is the clearing place for the problems of women students. Students are urged to come with questions that inevitably arise—social, personal, academic, or financial.

In addition to the friendly, sympathetic counseling of women students, the Dean of Women serves as the advisor to women's organizations at the Chicago Undergraduate Division; as sponsor of Alpha Lambda Delta, national scholastic honorary for freshman women, and Activities Honorary Society.

All student social events are coordinated and unified through her office in her capacity as chairman of the Administrative Committee on Social Events, Calendar, and Recreation. She offers helpful assistance to student groups in organizing dances, entertainments, special events, and other all-University functions.

Scholarships

Several types of scholarships are available to undergraduate students in the University of Illinois. On the basis of competitive examinations open to high school graduates each June, a few four-year tuition scholarships are awarded in each county in Illinois. Service in the Armed Forces entitles many veterans to the Military Scholarship. Each member of the General Assembly may nominate annually one student from his district for a scholarship. In addition, a number of scholarships are awarded by the University Scholarship Committee each spring for the following school year. All the scholarships offered, and the individual requirements, are listed in an information folder available upon request from the Office of Admissions and Records at Navy Pier.

Undergraduate scholarships usually cover tuition charges only. Although some are available only to students in a specific course, the majority may be used in any of the colleges. Students now enrolled may apply for a scholarship for any year; a few scholarships, however, may be awarded only to applicants without college experience. Information regarding scholarships may be obtained from the Office of the Dean of Students or the Office of Admissions and Records, Room 15.

Loan Funds

Loan funds are of two general classes: (1) emergency loan funds, and (2) long term or regular loan funds. Most of these funds have special qualifications which must be met by applicants.

Detailed information regarding loan funds may be obtained from the Office of the Dean of Students.

Student Employment

For students who find it necessary to earn a portion of their expenses, the Student Employment Division in the Office of the Dean of Men maintains a list of part-time jobs available, both in University offices and in industry and business in the Chicago area. Applications for part-time positions should be filed with the Student Employment Manager, Room 313.

The student who expects to be employed will find it to his advantage to arrange his class schedule so that consecutive hours are free each day. Employment for the first-year student should be a matter of necessity rather than choice.

Hospital and Medical Service

A Hospital and Medical Service fee of five dollars is charged each student at the time of registration to provide ward care in an approved hospital for a period not to exceed twenty-eight days in any semester. In addition, while confined to a hospital or to home, a substantial payment is made toward the attending physician's charges, usually sufficient in the case of minor illnesses to give complete protection. There is also an allowance for laboratory tests, anesthetic or administration thereof, use of operating room, medicine, drugs, and dressings. (X-ray is excluded.) The Hospital and Medical Service plan is under the supervision of the Dean of Men.

Note: A student who presents evidence of participation in any other group insurance system providing the same benefits as those covered by the University fee may petition, through the Office of the Dean of Men *during the first ten days of instruction*, for a refund of this fee.

HEALTH SERVICE

The University maintains a Student Health Service to promote better physical and mental health among the students at the Chicago Undergraduate Division. Physical examinations, given by the staff of the University Health Service, are required of all students prior to the time of their first registration and each year thereafter. Chest X-rays are required as part of the physical examination. Immunizing inoculations for smallpox, tetanus, diptheria, influenza, and typhoid fever are available to students free of charge.

Counseling and diagnosis—Health Service

The staff of five physicians instruct classes in hygiene and sanitation as follows:

HYGIENE 102. PERSONAL AND ENVIRONMENTAL HYGIENE. —Required of all undergraduate women during their first year of residence. I, II; 2 hours.

HYGIENE 105. PERSONAL AND ENVIRONMENTAL HYGIENE. —Required of all undergraduate men during their first year of residence. I, II; 2 hours.

As the functions of the Health Service are primarily educational and preventive, its staff does not assume responsibility for the care of students beyond giving medical advice, emergency treatment, and vaccinations. It is emphasized that advice to students contemplates a real

concern for the best treatment whenever indicated and that the discussion of student welfare problems with the staff of the Student Health Service is encouraged. Members of the staff are available at all times for conferences with the students about individual health problems. The Health Service is located on the third floor at the east end of the Pier. The office is open from 8 a.m. to 5:30 p.m. daily and from 9 a.m. to 12 noon on Saturdays and during vacation periods.

DIVISION OF SPECIAL SERVICES FOR WAR VETERANS

The University of Illinois Division of Special Services for War Veterans has established an office at the Chicago Undergraduate Division for the purpose of assisting the veteran in returning to civilian life, but it does not register students as on the Urbana campus. Instead, a counselor in this office assists the veteran in making educational adjustments and guides him in his search for the curriculum which will best satisfy his needs.

Through the Examiner and Recorder of the Chicago Undergraduate Division, the veteran can ascertain to what extent he may meet entrance requirements by credit for service or for courses taken through the United States Armed Forces Institute. Credit in military science, physical education, and hygiene will be granted to any veteran, honorably discharged, who presents evidence that he has completed the basic training program in the Army, Navy, Marine Corps, or Coast Guard. Credit for work taken in college training programs in technical schools, and in courses pursued while the veteran was in service, may be transferred upon the basis of evaluation by the Examiner and Recorder.

EXTRACURRICULAR ACTIVITIES

Student extracurricular activities are recognized as an important part of the student's life and are encouraged in part as an adjunct to curricular courses; to develop individual talents in speech, music, drama, journalism, radio production, etc.; and to develop qualities of leadership, personality, and character. Many student clubs and organizations are active on the campus. These groups sponsor varied social and cultural activities for the benefit of the entire student body.

The Office of the Dean of Students is responsible for the administration and coordination of all extracurricular activities. Functioning in an advisory capacity are the Faculty Committee on Student Affairs and the Student Congress.

The student government organization, the Student Congress, is comprised of four officers and fourteen representatives selected by vote of the entire student body at general elections each semester. Officers of the Congress serve with the Faculty Committee on Student Affairs.

Joint student-faculty administrative committees supervise the operating policies of student organizations. These committees are composed of a faculty representative of the Faculty Committee on Student Affairs and two members of the Student Congress.

Students are provided an opportunity for experience in journalism through the weekly student newspaper, the *Pier Illini*, written and edited entirely by students. Engineering students edit the Chicago Undergraduate Division section of the *Illinois Technograph*, the University of Illinois engineering periodical.

Supplementing classroom work, three language clubs, the Classics Club, the Commerce Club, the Geography Club, and the International Relations Club provide cultural programs open to all students. Engineering, architecture, chemistry, and pre-medical students may take part in the activities of their respective professional societies, several of which are affiliated with national professional organizations.

Students interested in music and drama may seek membership in the University Choir, the Theatre Guild, the Radio Production Club, the dance band, or the orchestra. Extracurricular organizations in athletics and physical education include the Varsity Lettermen's Club, Orchesis, the modern dance organization, and the Women's Athletic Association.

All-University dances are sponsored by the University dance committee. Other varied student interests include a chess club, a photography club, and an amateur radio organization.

Honorary scholastic societies include Alpha Lambda Delta for freshman women and Phi Eta Sigma for freshman men.

THE SPEECH CLINIC

The services of the Speech Clinic are available to those students who want assistance in correcting speech difficulties and to students who desire to increase their effectiveness and fluency in talking to others. Students who stutter, lisp, have foreign accents, hearing deficiencies, or voice problems are aided by the clinic. The clinic also assists students with the problems that sometimes arise in appearing and talking before

groups. Students planning theatrical or teaching careers are aided in meeting professional speech requirements.

The clinic is equipped with modern testing instruments and the staff is scientifically trained in diagnosis and treatment. Students may consult with the Speech Clinic by making appointments in Room 300, the Student Counseling Bureau office. No charge is made for the service.

DEBATING

The forensics program at the Chicago Undergraduate Division provides an opportunity for students to gain experience in debating and discussion. All students, including those without previous experience, may take part in the forensics activities.

The debating program begins each fall with an instructional program for newcomers and an intramural tournament. From mid-November to mid-April a full schedule of intercollegiate competition is maintained. In addition to Chicago-area colleges and universities which come to the Chicago Undergraduate Division for debates, guest teams from outside the city have included colleges and universities from Florida, Indiana, Iowa, Michigan, Missouri, Ohio, and Wisconsin. Debaters from Navy Pier also attend tournaments in Illinois and nearby states where they meet debaters from schools throughout the country.

Since its organization in 1947, the debate team has engaged in both junior and senior college competition, where the team has won honors and has maintained an excellent competitive record.

Problems of national and international interest are the topics for the forum discussions conducted as part of the forensics program. During the school year, the forum discussions are held every two weeks with speakers from visiting colleges and universities. A number of major universities and colleges in Illinois and adjacent states have participated in the forums. The talks by speakers from the Chicago Undergraduate Division and from the visiting schools are followed by audience participation periods.

Debating and the forum discussions are under the supervision of the Forensic Council, a faculty committee appointed by the Dean of the Chicago Undergraduate Division. Members of the faculty of the speech department work directly with student participants.

John O. Jones
Director of Athletics

ATHLETICS

The Chicago Undergraduate Division participates in ten varsity sports—football, basketball, baseball, cross-country, track, wrestling, swimming, gymnastics, tennis, and golf. In accordance with a special ruling, freshmen are allowed to participate in varsity sports without this participation affecting the three-year eligibility rule.

A special feature is the extensive intramural program in which students can elect to take part in boxing, wrestling, badminton, table-tennis, volleyball, basketball, gymnastics, handball, weight lifting, tennis, track, and softball. The intramural and intercollegiate programs are under the supervision of an athletic sub-committee of student and faculty representatives. Both programs are financed through funds from student activities fees.

The Chicago Undergraduate Division Gymnasium, adjacent to the west end of Navy Pier, is the center of the intramural and physical education programs. Basketball games, wrestling meets, and gymnastics meets are also held in the huge gymnasium which has floor space for eight full-size basketball courts.

A staff of 14 coaches directs the Chicago Undergraduate Division athletic activities. Varsity letter awards are made to athletes who meet the participation requirements of intercollegiate competition, to sophomore managers, and to sophomore cheerleaders.

UNIVERSITY SERVICES

UNIVERSITY LIBRARY

The Library of the Chicago Undergraduate Division is outstanding among the newer college libraries of the nation. Although only six years old, it contains nearly 65,000 volumes, all of which have been carefully chosen with the institution's undergraduate curricula in mind, as well as the general and recreational interests of students and faculty. Orders for new books are being placed constantly, so that it is expected that the Library will contain 100,000 selected volumes within the next few years.

Advisement and instruction department of the Library

While no attempt will ever be made to duplicate scholarly research facilities already available in the city, strong emphasis is placed on general reference, library instruction, and readers' advisory service, with close liaison maintained with the teaching program and student activities. An exceptional collection of general and special encyclopedias, atlases, bibliographies, dictionaries, handbooks, yearbooks, and directories (6,000 volumes) has been assembled. A complete dictionary catalog is provided, and 30 periodical indexing services are available. The subscription list includes nearly 600 magazines and journals. Twenty-year back files of 250 particularly useful periodicals have already been bound for permanent reference use and are available on open shelves. An extensive vertical-file pamphlet collection, excellent microfilm reading facilities, vocational guidance materials, and college catalogs are also provided.

The Library has two service areas. The open-shelf Main Reading Room is located on the second floor at the east end of the Pier. It offers liberal reference and circulation facilities, in addition to well-lighted study space for 700 students. The Reserve Book Station, located near the street car line, makes assigned reading materials conveniently available. The Library staff of 23 includes 9 trained librarians, with academic rank, and 14 full-time clerks. Library hours are 8:30 a.m. to 5 p.m., Monday through Friday, and 9 a.m. to 12 noon on Saturday.

UNIVERSITY BOOKSTORE

The University Bookstore is operated on a cooperative basis to provide texts and supplies as required by the various courses at the Chicago Undergraduate Division.

Students and faculty members may participate in a "share-the-profit" plan at the end of each year if the store realizes a profit for the operating year.

The Bookstore is located at Room 87. It is open daily, Monday through Friday, from 8:30 a.m. to 4:30 p.m. During the registration period, the Bookstore is open from 8 a.m. to 6 p.m.

FOOD SERVICE

The University operates non-profit food service facilities for the convenience of students, faculty, and staff. The student cafeteria serves well-balanced, low-cost lunches and breakfasts. The cafeteria is located at the east end of the Pier. A soda fountain, serving sandwiches and beverages, is operated in connection with the cafeteria.

A popular student spot between classes is the snack bar located at the entrance to the Pier, adjacent to the reception lounge. In addition, a dining room at the east end of the Pier offers cafeteria-style service to members of the faculty and staff.

COLLEGES

Curricula and

COURSES

COURSES REQUIRED OF ALL STUDENTS

The following course requirements must be met by all students registered at the Chicago Undergraduate Division. These subjects are to be begun in the first semester of the freshman year, except as otherwise provided, and are to be continued until these requirements are completed.

1. Hygiene—One semester. Credit may be obtained by a proficiency examination. (Veteran students who have completed basic training in the Army, Navy, Marine Corps, Coast Guard, of Merchant Marine receive credit for hygiene.) Transfer students having sophomore standing are exempt from hygiene.

2. Physical Education—Four semesters. **Women** students entering the University as freshmen are required to obtain credit for four semesters of work in physical education; those entering the University with 30 to 55 semester hours of transfer credit are required to obtain credit for two semesters of work in physical education. This requirement must be met even though the student has been granted two or less hours of transfer credit in physical education. However, if the student transferring with 30 to 55 semester hours of transfer credit is granted three hours of transfer credit in physical education, then only one additional semester hour of physical education must be completed at the University; and, if the student is granted four hours of transfer credit in physical education then that student will not be required to take any additional physical education at the University.

Men entering the University with less than 56 semester hours of credit are required to secure four semesters of credit in physical education, including the amount transferred. (Veteran students who have completed basic training while in the service are exempted.)

Physical education may be deferred only by written request through the Physical Education Department which will make recommendations to the dean of the student's college.

3. Rhetoric—Two semesters (Rhetoric 101 and 102). All students entering the University as freshmen direct from secondary schools are required to take a placement test in rhetoric. A satisfactory proficiency in the use of written English is a requirement for all undergraduate degrees. Students who receive grades of "C" or "D" in Rhetoric 102, or its equivalent, are required to take an English qualifying examination before graduating. Those who fail to pass the qualifying examination are required to pass an extra semester course in rhetoric (Rhetoric 200).

The Grading System

The following grades are given in the University of Illinois:

A—Excellent
B—Good
C—Fair
D—Poor (lowest passing grade)
E—Failure

The University does not use plus or minus signs with the letter grades. Further, there are no numerical equivalents.

A student with a failure may have a special examination on the recommendation of the head of the department approved by the dean of his college, and on payment of a fee of $5.00, or he may take courses in sequence, with the approval of the department.

Other symbols in use are:

W—Withdrawn from the course without penalty.

Ex—Absent from the final examination for reasons acceptable to the dean of the college concerned and hence "Excused." (Entitles the student to an examination later without fee, but becomes a failure if not removed during the first semester that the student is registered following the giving of the grade of "Ex.")

The student may also remove an "Ex" grade by registering in the course and completing it with a passing grade or better during the next semester in which he is registered. If the student, following this procedure, completes the course, the "Ex" from the semester before becomes a "W" and whatever grade he earns in the course the second time is the official grade in the course. This means that even if the student fails the course the second time, the "Ex" grade still remains "W."

Ab—Absent from the final examination without excuse acceptable to the dean of the college concerned (this grade is construed to be a failure). A student may remove an "Ab" grade from his record by taking a special examination, fee $5.00, during the next semester in which he is in residence, but not to be taken within ten days of the final examination period.

Inc—The grade of "Incomplete" is no longer authorized except in the required work in physical education. Except in this department instructors are required to assign a definite grade representing both the quality and the quantity of the work accomplished.

Grade-Point Average

In computing the grade-point average, weighted values are given to the grades as follows: A=5 grade points; B=4; C=3; D=2; E=1; Ab=1. To compute the grade-point average, multiply the number of hours of each grade by the weight, add the products, and divide by the number of hours. Thus, if you earn 3 hours of A, 6 of B, 3 of C, 2 of D, and 4 of E, the computation of your grade-point average is as follows:

Grade	*Hours*	*Weight*	*Grade Points*	
A	3	5	15	
B	6	4	24	
C	3	3	9	
D	2	2	4	
E	4	1	4	56
	16		56	$\frac{56}{18} = 3.122$

Your grade-point average is 3.122.

Robert P. Hackett, Associate Dean
Commerce and Business Administration

COLLEGE OF COMMERCE AND BUSINESS ADMINISTRATION

Through knowledge of modern business practices and the fundamental principles on which economic systems operate, the College of Commerce and Business Administration seeks to develop in students the intellectual powers necessary for administrative careers. For this purpose it offers a unified program of basic studies for freshmen and sophomores. Though the factual contents of many of the courses are directly useful in specific vocations, students should expect to serve an apprenticeship in the fields they enter after graduation from this college if they wish to prepare themselves for higher positions.

While concentrating in a special field, students are encouraged to elect courses offered in other colleges of the University and to secure as liberal an education as possible to avoid the narrowing effects of early specialization.

The program for the first two years is organized about a nucleus of courses in accountancy and economics, mathematics and science, language and literature, rhetoric and speech. While it is designed primarily as preparation for the third and fourth years of the curriculum, it affords a well-balanced combination of studies to those who are in college for only two years of preparation for work in the business world.

Students who have completed this two-year program with a satisfactory scholastic record are qualified for admission to the Upper Division of the College of Commerce and Business Administration or for admission to the College of Education, or the College of Law, or the School of Journalism and Communications. Students transferring to other colleges after completing only the two-year program of the College of Commerce receive their degrees not from the College of Commerce and Business Administration, but from the college to which they transfer on completing the requirements of that college.

REQUIREMENTS FOR ALL COMMERCE STUDENTS

(Except Commercial Teaching)

		CREDIT HOURS	NORMAL SEMESTER
1	Accountancy 101 or 102 (Principles)	3 or 2	1
2	Accountancy 105 (Procedure)	3	2
3	Accountancy 106 (Cost)	3	3
4	Accountancy 108[1] (Intermediate)	3	4
5	Business Law 100[2] (Principles)	3	4
6	Economics 100 (Introduction)	3	2
7	Economics 102 (Principles)	3	3
8	Economics 103 (Principles)	3	4
9	Economics 136 or 138 (History) Geography 105 (Economic)	3	1
10	Economics 170 (Statistics)	3	4
11	English or American Literature, or Foreign Language[3]	6	3 and 4
12	Hygiene 102 or 105	2	2
13	Management 101 (Industrial)	3	4
14	Marketing 101 (Principles)	3	4
15	Mathematics 103 and/or 112[4] (Algebra)	3 or 6	1 and/ or 2
16	Military[5]	4	1, 2, 3, 4
17	Physical Education	4	1, 2, 3, 4
18	Rhetoric 101 and 102 (Composition)	6	1, 2,
19	Rhetoric 151 (Business)	3	3
20	Science (Biology, Chemistry, Geology, Advanced Mathematics, Physics)	4	1, 2
21	Secondary List (Anthropology, History, Philosophy, Science, Psychology, Sociology)	6	4
22	Speech 101 (Principles)	3	3, 4
23	Additional hours in language or literature, mathematics, science, and secondary list so that when added to numbers 7, 11, 15, 19, 20, 21 and 22 (above) it will make a total of 39		
24	Free electives may be taken only when all possible required courses are satisfied or are on the current program.		

All of the courses offered in the College of Commerce are open to students in other undergraduate colleges of the University, provided proper prerequisites are met.

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[1]Required in Accountancy field only. Elective for all others.

[2]Those contemplating the fields of Accountancy, Commerce and Law, or Management should not take this course. For all others this course satisfied the requirement.

[3]Either literature or foreign language (French, German, Spanish) may be chosen. If literature is the choice a minimum of six (6) semester hours must be taken. If foreign language is the choice credit must be obtained through four semesters of that language. One year of high school language will substitute for one semester of the same language in college.

[4]A student should be guided by the placement examination in mathematics although in general the following will pertain: with one (1) unit of high school algebra, Mathematics 103 will be taken followed by Mathematics 112; with one and one-half (1½) units of high school algebra, Mathematics 112 will be taken; with two (2) units of high school algebra no college algebra need be taken but Mathematics 112 may be taken if desired.

[5]Not required for students doing first sixty (60) hours at the Chicago Undergraduate Division, but elective for any who qualify.

SUMMARY OF REQUIREMENTS FOR GRADUATION

A candidate for the degree of Bachelor of Science in a field of the College of Commerce and Business Administration must (1) meet the general University requirements with respect to registration, residence, scholarship, and fees; (2) have a minimum of 130 semester hours of credit, including credit for the required work in rhetoric, hygiene, physical education, and military science, and including a minimum of 60 hours in courses given in the College of Commerce; and (3) complete the requirements of one of the fields of concentration (accountancy; commerce and law; commercial teaching; economics of public utilities, transportation, government, and business; economic theory; finance; general economics; industrial administration; insurance; labor economics; management; marketing; personnel management; secretarial training, or statistical economics) with an average grade of not less than "C" in all courses counted toward graduation, whether taken at the University of Illinois of elsewhere.

ELECTIVES

Whenever a program for any session includes all possible required courses at that time, and it seems desirable to add other courses to make a reasonable number of hours, certain electives are recommended. Prerequisites for these electives should be observed carefully. These electives should be directed toward requirements in the Upper Division. They include management, marketing, anthropology, history, philosophy, political science, psychology, and sociology, as well as additional courses in mathematics, science, English, or foreign language. Any advice desired on these electives may be obtained at the office of the dean or from the advisor at the time of registration.

COMMERCE AND LAW

Students interested in obtaining a legal education may take their pre-legal work in the College of Commerce and Business Administration. This preparation should be of particular interest to students looking forward to some phase of the legal practice involving business or corporation law. The first two years are the same as the program for the Lower Division shown on page 37. The third year includes requirements of special value to the pre-law student. The courses involved here include commerce courses as well as those in political science, history, and philosophy.

When a student has completed 100 hours in the College of Commerce and Business Administration and 30 hours in the College of Law, including all required courses, he will be granted the degree of Bachelor of Science in Commerce and Law. Upon completion of the requirements of the two remaining years in the College of Law, the law degree will be granted.

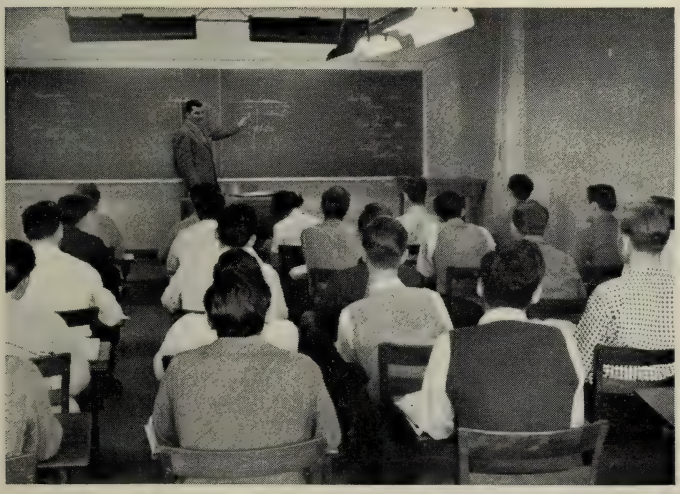
COMMERCIAL TEACHING

Since there are certain state requirements for certification of teachers in Illinois high schools, a special program to meet these requirements for commercial teachers has been established in the College of Commerce and Business Administration. The approved program for this field for the first two years is shown on page 40.

PRE-JOURNALISM

Students desiring to enter the School of Journalism and Communications may do so after the completion of two years with proper grade average in the College of Commerce and Business Administration. Those interested in advertising and other business phases of journalism may find consideration of this program profitable. The two-year program for this purpose is the same as that shown on page 37.

Lesson in accountancy



CURRICULUM PREPARATORY TO TEACHING COMMERCIAL SUBJECTS

First Year

FIRST SEMESTER	HOURS
Rhet. 101—Rhetoric and Composition	3
Accy. 101—Principles of Accounting	3
Econ. 136—American Economic History	3
Math. 112—College Algebra	3
Biology 101—Fundamentals of Biology	4
Physical Education	1
Total	17

SECOND SEMESTER	HOURS
Rhet. 102—Rhetoric and Composition	3
Econ. 100—Introduction to Business	3
Biology (choice)	4
Hygiene 102 or 105	2
Educ. 101—Nature of Teaching Profession	2
Accy. 105—Accounting Procedure	3
Physical Education	1
Total	18

Second Year

FIRST SEMESTER	HOURS
Speech 101—Principles of Effective Speaking	3
Econ. 102—Principles of Economics	3
Sociol. 100—Principles of Sociology	3
Geog. 105—Introduction to Economic Geography	3
Accy. 106—Elementary Cost Accounting	3
Physical Education	1
Total	16

SECOND SEMESTER	HOURS
Econ. 103—Principles of Economics	3
Hist. 152—History of the United States	3
Mktg. 101—Principles of Marketing	3
Psych. 100—Introduction to Psychology	4
Elective*	3
Physical Education	1
Total	17

*This could include: Business Law 100, Political Science 150, or Rhetoric 151 as specific requirements; Accountancy 108, American or English Literature, or Philosophy 105 as option electives; Marketing 101 as a free elective.

Whichever ones chosen would affect the junior or senior program in that respect.

Solving problems in statistics

Frederick W. Trezise, Associate Dean
Engineering Sciences

COLLEGE OF ENGINEERING

To prepare men for professional work in engineering and for responsible positions of a technical and semi-technical character in industry, commerce, and government, the College of Engineering at the Chicago Undergraduate Division provides training in the mathematical and physical sciences and their applications to the design, construction, and operation of industrial plants and public and private works of all kinds.

The curricula in this college, though widely varied and specialized, are built on a general foundation of scientific facts and theories applicable to many different fields. Work in the classrooms, laboratories, shops, and drafting rooms is correlated by practical problems which the students solve by methods similar to those of practicing engineers.

In addition to the fundamental and technological courses in each curriculum, some cultural courses are required, such as history, economics, and rhetoric, and others are elective, so that each student may broaden his program. While each student pursues a curriculum of his own choice according to the field of his particular interest, all students must take certain courses. Basic courses in mathematics, chemistry, physics, rhetoric, and general engineering drawing are required in the first two years.

At the Chicago Undergraduate Division the first two years of courses are offered in the following fields: aeronautical engineering, ceramic engineering, civil engineering, electrical engineering, engineering physics, general engineering, mechanical engineering, metallurgical engineering, and mining engineering. Those few advanced courses which are not available here are properly noted.

Instruction in all courses is designed primarily to prepare the student to enter the College of Engineering on the Urbana campus of the University of Illinois in his third year.

SUMMARY OF REQUIREMENTS FOR GRADUATION

Students in the College of Engineering who meet the University's general requirements with respect to registration, residence, and fees, and who maintain satisfactory scholastic records in this college, are awarded degrees appropriate to their curricula. Each curriculum requires a minimum of 136 semester hours of credit, not counting the required work in military science and physical education.

Each curriculum leads to the degree of Bachelor of Science and may ordinarily be completed in four years. A graduate of one curriculum ordinarily can qualify for another baccalaureate degree by doing a fifth year of work, consisting of 30 to 36 semester hours, acceptable to the faculty of this college, providing plans have been made looking toward such an arrangement at the beginning of his third year.

A graduate of the College of Liberal Arts and Sciences, or any other college of equal standing, who has adequate training in mathematics, physics, and mechanics to enable him to begin the third year of a curriculum in the College of Engineering, can usually qualify for the degree of Bachelor of Science from this college by two and one-half years of work.

ELECTIVES AND OPTIONS

Non-technical electives for students in the College of Engineering include all courses offered in the College of Liberal Arts and Sciences, the College of Commerce, and certain courses in the College of Engineering. Technical electives include practically all courses in the College of Engineering not required in the student's curriculum, except all elementary work in drawing.

Departmental electives and technical options are restricted to courses of a technical character as listed under this classification by each department. Options are groups of related courses in a special field of subject matter.

Most of the curricula in the College of Engineering provide an opportunity for concentration of the student's effort in the senior year along

lines of his particular interest, within the broad field of his chosen curriculum. This is accomplished by curriculum options, which are groups of subject-matter related to recognized fields of concentration in professional engineering practice.

COMMON PROGRAM FOR FRESHMAN

Freshmen in the College of Engineering take this program unless otherwise specified in the curricula outlined on the following pages.

First Year

FIRST SEMESTER	HOURS
Chem. 102 or 103—General Chemistry	3 or 4
G.E.D. 101—Elements of Drawing; or G.E.D. 104—Advanced Drawing	4
Math. 112—College Algebra	3
Math. 114—Plane Trigonometry; or Math. 115—Advanced Trigonometry	2
Rhet. 101—Rhetoric and Composition	3
Physical Education	1
Total	16-17

SECOND SEMESTER	HOURS
Chem. 104—Chemistry of the Metallic Elements	4
G.E.D. 102—Descriptive Geometry	4
Math. 122—Analytic Geometry	4
Rhet. 102—Rhetoric and Composition	3
Hygiene 102 or 105	2
Physical Education	1
Total	18

CURRICULUM IN AERONAUTICAL ENGINEERING

First Year

Common Program for Freshmen (above).

Second Year

FIRST SEMESTER	HOURS
G.E.D. 103—Aircraft Drafting and Lofting	3
Math. 132—Calculus	5
M.E. 182—Manufacturing Processes	3
Phys. 103—General Physics	5
Physical Education	1
Total	17

SECOND SEMESTER	HOURS
Math. 142—Calculus	3
Phys. 104—General Physics	5
Speech 101—Principles of Effective Speaking or Non-Technical Elective	3
T.A.M. 156—Analytical Mechanics (Statics and Dynamics)	5
Physical Education	1
Total	17

CURRICULUM IN CERAMIC ENGINEERING

First Year [1]

Second Year

FIRST SEMESTER	HOURS	SECOND SEMESTER	HOURS
Cer. E. 101—Introduction to Ceramic Engineering[2]	3	Cer. E. 102—Ceramic Processes and Equipment[2]	3
Chem. 123—Quantitative Analysis for Engineering[3]	5	Geol. 130—General Minerology[2]	3
Math. 137—Calculus	3	Math. 147—Calculus	3
Phys. 103—General Physics	5	Phys. 104—General Physics	5
Physical Education	1	T.A.M. 150—Analytical Mechanics (Statics)	2
		Physical Education	1
Total	17	*Total*	17

CURRICULUM IN CHEMICAL ENGINEERING

This curriculum is administered by the College of Liberal Arts and Sciences. See pages 55 and 56.

CURRICULUM IN CIVIL ENGINEERING

First Year [4]

Common Program for Freshmen (page 43).

Second Year

FIRST SEMESTER	HOURS	SECOND SEMESTER	HOURS
C.E. 103—Route Surveying[5]	3	C.E. 235—Plain Concrete	2
C.E. 160—Building Construction	3	Geol. 150 Engineering Geology[6]	3
Math. 132—Calculus	5	Math. 142—Calculus	3
Phys. 103—General Physics	5	Phys. 104—General Physics	5
Physical Education	1	T.A.M. 150—Analytical Mechanics (Statics)	2
Total	17	Econ. 108—Elements of Economics; or Speech 101—Principles of Effective Speaking	3
		Physical Education	1
		Total	19

[1]Common Program for Freshmen (page 43), except that Chem. 105 and Math. 117-127 are substituted for Chem. 104 and Math. 112, 114, and 122.
[2]Not offered at Chicago Undergraduate Division; must be taken at Urbana.
[3]Not offered at Chicago Undergraduate Division; substitute Chem. 122—Elementary Quantitative Analysis.
[4]C. E. 101 and 102 are required courses which will be taught only at the summer surveying camp following the freshman year.
[5]Offered during the fall semester only.
[6]Eight hours of credit in foreign language (French, German, or Spanish) may be substituted for Geol. 150 (3 hours), Econ. 108 or Speech 101 (3 hours), and approved electives (2 hours).

CURRICULUM IN ELECTRICAL ENGINEERING

First Year

Common Program for Freshmen (page 43).

Second Year

FIRST SEMESTER	HOURS
Econ. 108—Elements of Economics	3
Math. 132—Calculus	5
Speech 101—Principles of Effective Speaking	3
Phys. 103—General Physics	5
Physical Education	1
Total	17

SECOND SEMESTER	HOURS
E.E. 126—Electric Circuits and Fields	4
Math. 142—Calculus	3
Phys. 104—General Physics	5
T.A.M. 154—Analytical Mechanics (Statics and Dynamics)	4
Physical Education	1
Total	17

CURRICULUM IN ENGINEERING PHYSICS

The purpose of this curriculum is to prepare students for investigations in engineering problems calling for a knowledge of physics and mathematics or chemistry, and for positions in certain industries which prefer men with a thorough education in basic science.

Students in the engineering physics curriculum, when registering for advanced undergraduate courses in physics at any stage in that curriculum, must have a grade average of at least 3.5 in all subjects, exclusive of the basic courses in military training and physical education, and a combined grade average of at least 3.5 in all subjects in mathematics and physics taken prior to such registration. Transfer students must have a corresponding record in the institution from which they transfer, and must maintain such status at the University of Illinois.

First Year

Common Program for Freshmen (page 43) except that substitution of Chem. 106 for Chem. 104 is advised.

Second Year[1]

FIRST SEMESTER	HOURS
German or Approved Elective	4
Math. 132—Calculus	5
Phys. 103—General Physics	5
Physical Education	1
Approved Elective	3
Total	18

SECOND SEMESTER	HOURS
German or Approved Elective	4
Math. 142—Calculus	3
Phys. 104—General Physics	5
T.A.M. 150—Analytical Mechanics (Statics)	2
Physical Education	1
Approved Elective	3
Total	18

[1]The election of Chem. 110, 124, and 234 is advised. Students wishing to emphasize geophysics should elect most or all of the technical options in geology. Five hours must be approved non-technical electives.

CURRICULUM IN GENERAL ENGINEERING

This curriculum provides a fundamental engineering training with moderate emphasis on design and a fixed requirement of fifteen hours in economics, corporation finance, engineering law, and labor problems. Specialization in any field of the student's choice is permitted in the liberal provisions for elective studies, as well as an option by means of which he may elect either structural or machine design. The curriculum is intended for students who do not wish to pursue the more specialized engineering curricula, but who wish to ally themselves with industrial and commercial development in the fields of management, operation, and construction—preparation for which is founded on scientific and engineering facts and disciplines, supplemented by economic and social orientations. A sales engineering option can be readily planned within the elective framework of the curriculum.

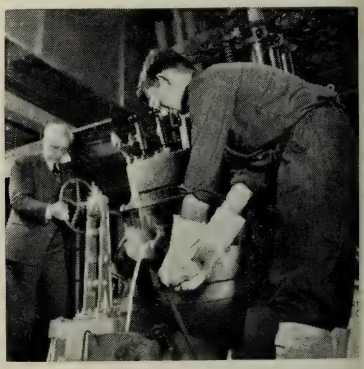
First Year

Common Program for Freshmen (page 43).

Second Year

FIRST SEMESTER	HOURS
Econ. 108—Elements of Economics	3
Math. 132—Calculus	5
M.E. 183—Materials Casting; or C.E. 115—General Surveying	3
Phys. 103—General Physics	5
Physical Education	1
Total	17

SECOND SEMESTER	HOURS
Speech 101—Principles of Effective Speaking	3
Math. 142—Calculus	3
Phys. 104—General Physics	5
T.A.M. 150—Analytical Mechanics (Statics)	2
C.E. 115—General Surveying; or M.E. 183—Materials Casting	3
Physical Education	1
Total	17



Metal pouring in the foundry

CURRICULUM IN MECHANICAL ENGINEERING

First Year

Common Program for Freshmen (page 43).

Second Year

FIRST SEMESTER	HOURS
M.E. 171—Mechanism	2
Math. 132—Calculus	5
M.E. 183—Materials Casting; or M.E. 184—Metal Processing	3
Phys. 103—General Physics	5
Physical Education	1
Total	16

SECOND SEMESTER	HOURS
T.A.M. 156—Analytical Mechanics (Statics and Dynamics)	5
Math. 142—Calculus	3
M.E. 184—Metal Processing; or M.E. 183—Materials Casting	3
Phys. 104—General Physics	5
Physical Education	1
Total	17

CURRICULUM IN METALLURGICAL ENGINEERING

First Year

Common Program for Freshmen (page 43) except that Chem. 105 and G.E.D. 106 are substituted for Chem. 104 and G.E.D. 101.

Second Year

FIRST SEMESTER	HOURS
Chem. 123—Quantitative Analysis for Engineers[1]	5
Math. 132—Calculus	5
Phys. 103—General Physics	5
Physical Education	1
Total	16

SECOND SEMESTER	HOURS
Math. 142—Calculus	3
Phys. 104—General Physics	5
Met. E. 150—Introduction to Metallurgy[2]	3
T.A.M. 150—Analytical Mechanics (Statics)	2
Physical Education	1
Approved Elective	3
Total	17

CURRICULUM IN MINING ENGINEERING

First Year

Common Program for Freshmen (page 43).

Second Year

FIRST SEMESTER	HOURS
Geol. 150—Geology for Engineers	3
Math. 132—Calculus	5
Min. E. 151—Elements of Mining[2]	4
Phys. 103—General Physics	5
Physical Education	1
Total	18

SECOND SEMESTER	HOURS
Geol. 130—General Minerology[2]	3
Math. 142—Calculus	3
Min. E. 152—Fuels[1]	3
Phys. 104—General Physics	5
T.A.M. 150—Analytical Mechanics (Statics)	2
Physical Education	1
Total	17

[1]Not offered at Chicago Undergraduate Division; substitute Chem. 122—Elementary Qualitative Analysis.

[2]Not offered at Chicago Undergraduate Division; must be taken at Urbana.

ARCHITECTURE

(Offered under the College of Engineering)

The curriculum in architecture is a five-year course and is offered with two optional programs. The work for the first year is identical. A field of specialization is selected in the second year.

The general option places the major emphasis on architectural design and includes a substantial program in architectural construction. While the esthetic is emphasized, basic preparation in liberal and scientific fields is required. The aim is to train the student for efficient service as a drafstman or designer in an architectural organization and to provide him with the necessary foundation for future independent practice.

The construction option (architectural engineering) offers a major study in building design, a thorough training in all forms of building construction, and emphasizes the structural and mechanical aspects of architecture. As the curriculum includes 3½ years of architectural design, freehand drawing, and the history of architecture, the student who is primarily interested in construction can acquire a considerable knowledge of the artistic and utilitarian phases of planning. This option affords a relatively wide range of elective courses in the social sciences, business, engineering, language, and literature. It also provides sufficient training for independent practice as an architectural engineer.

Class in architectural design

ELECTIVES

The electives provided in the two architectural curricula may consist of any courses given in the University and not required in the curricula, not paralleling the subject matter of required courses, and not open to fresh-

men. The following, which are open to freshmen, are also acceptable as electives: History 111, 112, 131; Botany 100, 101; Geography 101, 104, 105; Geology 101; Biology 101; Speech 101, 141; English 111, 112; Accountancy 101. Courses with prerequisites of sophomore standing: Rhetoric 152; Economics 108; English 131; Political Science 150, 151; Sociology 100.

FIVE-YEAR CURRICULUM IN ARCHITECTURE

Students entering as freshmen in September, 1949, and thereafter, follow the five-year curriculum in architecture and architectural engineering as outlined below.

First Year

FIRST SEMESTER	HOURS
G.E.D. 107—Architectural Projections	2
Art 181—Freehand Drawing	2
Rhet. 101—Rhetoric and Composition	3
Math. 117—Combined Freshman Mathematics	5
Hygiene 102 or 105	2
Physical Education	1
Total	15

SECOND SEMESTER	HOURS
G.E.D. 108—Architectural Projections	2
Art 182—Freehand Drawing	2
Rhet. 102—Rhetoric and Composition	3
Math. 127—Combined Freshman Mathematics	4
Arch. 101—Introduction to Architecture	3
Physical Education	1
Total	15

Second Year

FIRST SEMESTER	HOURS
Arch. 131—Architectural Design	3
Art 183—Freehand Drawing	2
Arch. 141—Materials and Methods of Construction I	2
Phys. 101—General Physics	5
Elective	3
Physical Education	1
Total	16

SECOND SEMESTER	HOURS
Arch. 132—Architectural Design	3
Art 184—Freehand Drawing	2
Arch. 142—Materials and Methods of Construction II	2
Arch 113—History of Ancient Architecture	2
T.A.M. 171—Elementary Mechanics	3
Elective	3
Physical Education	1
Total	16

FIVE-YEAR CURRICULUM IN ARCHITECTURAL ENGINEERING

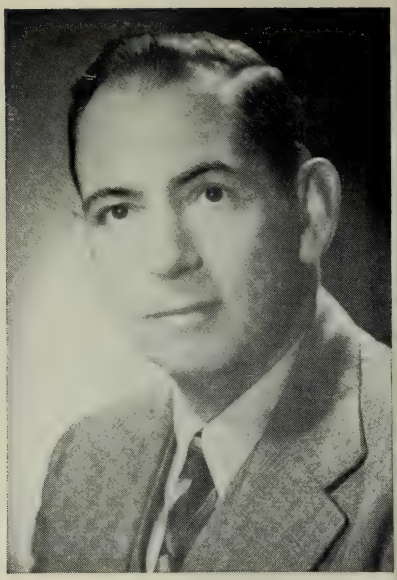
First Year

Common Program for Freshmen (above).

Second Year

FIRST SEMESTER	HOURS
Arch. 131—Architectural Design	3
Art 183—Freehand Drawing	2
Arch. 141—Materials and Methods of Construction I	2
Phys. 101—General Physics	5
Math 137—Calculus	3
Physical Education	1
Total	16

SECOND SEMESTER	HOURS
Arch. 132—Architectural Design	3
Art 184—Freehand Drawing	2
Arch. 142—Materials and Methods of Construction II	2
Arch. 113—History of Ancient Architecture	2
Math. 147—Calculus	3
T.A.M. 150—Analytical Mechanics	2
Physical Education	1
Total	15



Harold W. Bailey, Associate Dean
Liberal Arts and Sciences

COLLEGE OF LIBERAL ARTS AND SCIENCES

The College of Liberal Arts and Sciences at the Chicago Undergraduate Division offers the first two years of work in the several professional, pre-professional, and general curricula offered in this college at the Urbana campus. In all these curricula, the first two years are devoted to general basic education with increasing specialization in the last two years. A student who is not certain of his vocational objective at the time of his admission to college has an opportunity to do considerable educational exploration in his first two years or commonly to change his vocational objective without additional time. Such a change after the beginning of the junior year usually cannot be made without loss of time.

It is assumed that upon completion of the two-years' work in the Chicago Undergraduate Division students will transfer to the Urbana campus to continue in their chosen field at the junior level. Students desiring to transfer to institutions other than the Urbana campus of the University of Illinois should familiarize themselves with the requirements of the school of their choice so that they may plan their work most effectively while at the Chicago Undergraduate Division.

The following Liberal Arts and Sciences curricula are offered at the Chicago Undergraduate Division: general, chemistry, chemical engineering, pre-medicine, pre-dentistry, pre-nursing, teacher-training, pre-law, pre-veterinary medicine, and pre-journalism. Content of the courses closely parellels that given on the Urbana campus of the University of Illinois.

General Curriculum

All students who do not elect to follow one of the specialized curricula described below enroll in the general curriculum. The general curriculum requires a number of basic courses in literature or philosophy, social studies and natural sciences, and a reading knowledge of at least one foreign language. Each student must select a major and a minor or a split minor in a field of concentration the last two years.

Because of the wide range of courses open to students in the general curriculum, it is not feasible to specify definite sequences of courses to be taken by any student in each of the four years of this curriculum. Under the guidance of an adviser, each student is expected to plan his own program within the general requirements outlined below. Students at the Chicago Undergraduate Division will find it to their advantage to complete the group requirements listed on pages 52 and 53 in their first four semesters in the University.

SUMMARY OF REQUIREMENTS FOR GRADUATION

Each candidate for the degree of A.B. or B.S. in the general curriculum of Liberal Arts and Sciences must meet the following requirements:

Hygiene—Hygiene 102 or 105.
Physical Education—4 semesters.
Rhetoric—Rhet. 101 and 102. (If C or D in Rhet. 102, student must pass qualifying examination or take Rhet. 200.)
Foreign Language—Equivalent of two college years in same language.
U.S. History—One unit of American History or History 151 and 152.
Mathematics—One unit of Algebra and one unit of Plane Geometry or Math. 101 and Math. 102.
Major—20 approved hours in one department.
Minor(s)—20 approved hours in one or two departments.
Advanced hours—30 hours of credit in courses not open to freshmen and sophomores.
Residence—Either first 88 hours uninterrupted, or last 30 hours uninterrupted at the University of Illinois. For students at the Chicago Undergraduate Division, the last 30 hours must be taken at Urbana.
Average—3.0 (C) minimum average.
Biological Sciences[1] . . . . . 8 hours.
Physical Sciences[1] . . . . . 8 hours.
Humanities[1] . . . . . 8 hours.
Social Sciences[1] . . . . . 8 hours.
Total hours—120 hours, exluding basic military and all physical education courses, with not more than one quarter of the work with a grade of D.

[1]The eight hours must be taken in approved sequence.

LIBRARY
UNIVERSITY OF ILLINOIS

Required Subjects

A. Foreign Language—A reading knowledge of a foreign language (French, German, Greek, Italian, Latin, Portuguese, or Spanish) equivalent to that resulting from four semesters of study of a foreign language commenced in college. To be begun in the first semester of the freshman year, except as otherwise provided, and to be continued until the requirement is completed. This requirement is satisfied by passing French 104, German 104 or 144, Greek 202, Italian 104, Latin 104 or 105, Portuguese 104, Spanish 104, or a more advanced course in any of these languages. Proficiency examinations are offered in all these courses as well as in the more elementary courses in languages. Note: No credit toward graduation is given for a beginning course in a foreign language unless it is continued through a full year. Students planning to enter a graduate college are advised to obtain a reading knowledge of both French and German.

B. Group Requirements[1]—To be begun in the freshman year and completed before the senior year. Students at the Chicago Undergraduate Division will find it to their advantage to complete these requirements by the end of their fourth semester. Proficiency examinations may be taken for credit in some of these subjects.

Students who entered college on or after September 1, 1946, are required to complete the following group requirements:

1. *Basic Knowledge*—One unit of American history or Hist. 151 and 152. One unit of algebra and one unit of plane geometry or Math. 101 and 102.

2. *General Education*—An approved two-semester course or sequence of courses in each of the following areas, with a minimum of eight hours credit in each: (a) humanities, (b) biological sciences, (c) physical sciences, (d) social sciences.

[1]For students who entered prior to September 1, 1946, the requirements were:
(a) Liberal Arts. A total of fifteen hours chosen from at least three of the following subjects including one course in English or foreign literature or in the history of philosophy: English literature, foreign literature (advanced courses requiring at least two years of college work or its equivalent), economics, history, philosophy, political science, and sociology.
(b) Sciences. A total of fifteen hours chosen from at least three of the following subjects including one course with a minimum of four hours laboratory work a week: astronomy, bacteriology, botany, chemistry, entomology, geography, geology, mathematics, physics, physiology, psychology and zoology.

ELECTIVES

1. *Liberal Arts and Sciences*—Any course offered in the College of Liberal Arts and Sciences may be used as an elective.

2. *Other Colleges*—Electives totaling as much as but not more than 32 hours may be taken in other colleges and schools of the University and counted toward graduation from this college, in addition to the courses acceptable for major and minor requirements, if such electives are in conformity with the following list approved by the faculty:

Accountancy—A total of 6 hours (including not more than one of the following courses: Accountancy 101, 102, 201).

Agricultural Economics—A total of 6 hours

Architecture—A total of 15 hours.

Art—A total of 15 hours.

Business Law—A total of 6 hours.

Economics—All courses.

Education—A total of 20 hours.

Engineering—A total of 10 hours.

Forestry—A total of 3 hours.

Home Economics—All courses.

Horticulture—A total of 6 hours.

Hygiene—Hygiene 102 or 105 (2 hours).

Journalism—A total of 10 hours.

Landscape Architecture—A total of 7 hours.

Law—A student of senior standing with an average of 3.5 who has been in residence either the first two years or the last year of his pre-legal work may take and count toward the A.B. degree not to exceed 32 hours in the College of Law, provided that not less than two courses amounting to at least 5 hours a semester are taken with the advice of the Dean of the College of Law, and provided further that if any such student desires to take more than 6 hours of law work he must also register in the College of Law.

Library Science—A total of 10 hours.

Management and Marketing—A total of 6 hours. Typewriting, secretarial training, and shorthand may not be counted for credit.

Military Training—A total of 8 hours in advance courses.

Music—A total of 15 hours approved by the Director of the School, unless the student is majoring in music.

Physics—All courses.

Lecture in science

CHEMISTRY AND CHEMICAL ENGINEERING

The minimum language requirement for graduation in the following curricula in chemistry and chemical engineering is the equivalent of two years of college work in German or French. When a student does not offer either German or French for entrance, the second year of the language required for graduation may be counted as an elective in either curriculum.

Students who enter with inadequate preparation in chemistry, mathematics, and foreign languages in high school will find it difficult to complete their professional training in chemical engineering in four years. The optional five-year curriculum is recommended especially for those who do not qualify for Chemistry 107 and Mathematics 117, and who do not have two units of high school credit in French or German. Students should note that they must have a 3.5 general average for registration in these curricula after they have attained junior standing.

CURRICULUM IN CHEMISTRY

First Year

FIRST SEMESTER	HOURS	SECOND SEMESTER	HOURS
Chem. 107—General Chemistry and Qualitative Analysis[1]	5	Chem. 108—General Chemistry and Qualitative Analysis	5
Math. 117—Freshman Mathematics[2]	5	Math. 127—Freshman Matehmatics[2]	4
German or French	4	German or French	4
Rhet. 101—Rhetoric and Composition	3	Rhet. 102—Rhetoric and Composition	3
Physical Education		Hygiene 102 or 105	2
		Physical Education	
Total	17	*Total*	18

Second Year

FIRST SEMESTER	HOURS	SECOND SEMESTER	HOURS
Chem. 124—Quantitative Analysis	5	Chem. 234—Organic Chemistry[4]	5
Math. 137—Calculus	3	Math. 147—Calculus	3
Phys. 103—General Physics	5	Phys. 104—General Physics	5
Physical Education		Physical Education	
Electives[3]	3	Electives[3]	2-5
Total	16	*Total*	15-18

[1]All students with entrance credit in chemistry are required to take a proficiency examination before registering for Chem. 107. Those who do not show the necessary proficiency will be placed in Chem. 101 or 102, after which they will take Chem. 106 and 110. For students without entrance credit in chemistry, the required sequence is Chem. 101, 106, and 110.

[2]For students who do not take Math. 117-127, the required sequence is Math. 112 (or 111), 114 (or 115), 122, 132, and 142.

[3]Suggested courses for electives are: Zool. 101, 107, 132; Biology 101, 111, 121, 131, 132; Bot. 100, 101; Engl. 121, 122; Geol. 130, 150; Hist. 151, 152; Bact. 104, 105; German or French. Of the total electives for graduation, at least 12 hours should be from advanced courses in chemistry and at least 10 hours from courses offered by other departments.

[4]Not given at Chicago Undergraduate Division.

Experiments in chemistry

FOUR-YEAR CURRICULUM IN CHEMICAL ENGINEERING

First Year

FIRST SEMESTER	HOURS
Chem. 107—General Chemistry and Qualitative Analysis[1]	5
Math. 117—Freshman Mathematics[2]	5
German or French	4
Rhet. 101—Rhetoric and Composition	3
Physical Education	
Total	17

SECOND SEMESTER	HOURS
Chem. 108—General Chemistry and Qualitative Analysis	5
Math. 127—Freshman Mathematics[2]	4
German or French	4
Rhet. 102—Rhetoric and Composition	3
Hygiene 102 or 105	2
Physical Education	
Total	18

Second Year

FIRST SEMESTER	HOURS
Chem. 124—Quantitative Analysis	5
Math 137—Calculus	3
Phys. 103—General Physics	5
G.E.D. 106 Elements of Drawing	3
Physical Education	
Total	16

SECOND SEMESTER	HOURS
Chem. 240—Physical Chemistry[3]	3
Chem. 241—Physical Chemistry Lab.[3]	1
Math. 147—Calculus	3
Phys. 104—General Physics	5
T.A.M. 150—Analytical Mechanics (Statics)	2
Physical Education	
General Studies Electives[4]	3
Total	17

[1]Students who do not qualify for Chem. 107 automatically go into the five-year curriculum.
[2]For students who do not take Math. 117-127, the required sequence is Math. 112 (or 111) 114 (or 115), 122, 132, and 142.
[3]Not given at Chicago Undergraduate Division.
[4]These electives should be chosen from the Division of Humanities or Social Sciences with the approval of the adviser. The courses are intended to broaden the engineer and provide an interest and liberal education in economics, history, literature, philosophy, political science, or public speaking.

OPTIONAL FIVE-YEAR CURRICULUM IN CHEMICAL ENGINEERING

First Year

FIRST SEMESTER	HOURS	SECOND SEMESTER	HOURS
Chem. 101 or 102—General Chemistry[1]	5 or 3	Chem. 106—Inorganic Chemistry	5
Math. 117—Freshman Mathematics[2]	5	Math. 127—Freshman Mathematics[2]	4
Rhet. 101—Rhetoric and Composition	3	German or French	4
German or French	4	Rhet. 102—Rhetoric and Composition	3
Physical Education		Hygiene 102 or 105	2
		Physical Education	
Total	15-17	*Total*	18

Second Year

FIRST SEMESTER	HOURS	SECOND SEMESTER	HOURS
Chem. 110—Qualitative Analysis	5	Chem. 124—Quantitative Analysis	5
Math. 137—Calculus	3	Math. 147—Calculus	3
German or French	4	Phys. 104—General Physics	5
Phys. 103—General Physics	5	German or French	4
Physical Education		Physical Education	
Total	17	*Total*	17

PRE-MEDICAL CURRICULUM

This curriculum, which combines three years of work in the College of Liberal Arts and Sciences with one year of work in the College of Medicine, is available to students under the following conditions:

Any freshman whose scholarship rank is in the upper half of his high school graduating class, on matriculating in the College of Liberal Arts and Sciences, is eligible for admission to the pre-medical curriculum.

Pre-medical students must maintain a 3.5 average during the first two semesters in the curriculum. By the end of the third semester the average for the three semesters must be raised to 3.75 and this average must be maintained. Students who fail to meet these minimum requirements will be transferred to the general curriculum.

A student transferring to this college with advanced standing must meet the scholastic requirements at the level at which he transfers, in terms of the University's grading system, in order to be admitted to the pre-medical curriculum.

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[1]Students who qualify for Chem. 107 should take the Chem. 107, 108, 122, 240 sequence rather than Chem. 101, 106, 110, 122 and thus have five additional hours of advanced electives.

[2]For students who do not take Math. 117-127, the required sequence is Math. 112 (or 111), 114 (or 115), 122, 132, and 142.

A student who enters the College of Medicine at the University of Illinois, having completed the junior year at Urbana and having met the language requirement and the appropriate group requirements in Group B, on page 52, may receive the degree of Bachelor of Science from the College of Liberal Arts and Sciences on completion of the first year of medicine. No student may receive credit toward this degree for more than one year of work done in any other college or university.

Other factors being equal, students at the University of Illinois who have completed the pre-medical curriculum with an average of 4.3 or better, will be given preferential consideration by the Committee on Admissions, provided that at least the second and third years have been done within the University.

The specific requirements for admission to the College of Medicine at the University of Illinois are as follows:

	Semester Hours
Chemistry (including, in addition to introductory courses, four hours of organic chemistry, three hours of quantitative analysis, and three hours of physical chemistry—Chem. 101 or 102, 105, 122, 133, and 247)	16
Physics (including laboratory work in mechanics, heat, sound, light, and electricity—Phys. 101 and 102)	8
Biology (including general[1] and vertebrate zoology and general embryology)	10
Rhetoric and Composition (Rhet. 101 and 102)	6
Modern Language (French, German, or Spanish, etc.)	6
Social Sciences Electives (including courses from at least two of the following fields: anthropology, economics, history, philosophy, political science, psychology, and sociology)	14
Electives	28
Total	88

PRE-DENTAL CURRICULUM

Students applying for admission to the pre-dental curriculum must have ranked in the upper half of their high school graduating class. They must maintain at all times in the curriculum a minimum average of 3.5. The work covered by the first two years of the pre-medical curriculum enables students to meet the requirements for admission to the University of Illinois College of Dentistry. Quantitative analysis and physical chemistry are recommended as electives. Since the function of the pre-dental years is to supply a general background for the student as well as specific training in the fundamental concepts of the sciences, it is recommended that the elective hours also include history, economics, sociology, philosophy, and at least one modern language.

[1]The general zoology requirement may be met by Biology 101 and 131, or Biology 101 with a grade of "B."

The specific requirements for admission to the College of Dentistry are as follows:

	Semester Hours
Chemistry (including four hours of organic chemistry—Chem. 101 or 102, 105, and 133)	12
Physics (Phys. 101 and 102)	6
Biology (including general zoology[1])	6
Rhetoric and Composition (Rhet. 101 and 102)	6
Electives (including history, economics, sociology, philosophy, and at least one modern language; excluding military, hygiene, and physical education)	30
Total	60

Pre-dental students who wish to be candidates for the degree of Bachelor of Science in Dentistry on the completion of the second year in the College of Dentistry should consult the College Catalog.

PRE-NURSING CURRICULUM

The University of Illinois offers a program leading to a Bachelor of Science degree in Nursing with the University of Illinois—Cook County School of Nursing and in affiliation with Michael Reese, Presbyterian, and St. Luke's Schools of Nursing. The degree program is in two parts, a two-year pre-professional course and a 30 to 36-month professional program. Following the completion of the 60 semester hours of prescribed college work outlined below, students must enroll for professional education and clinical experience in nursing in one of the affiliated schools of nursing.

Graduate nurses may qualify for the degree provided that (1) they are eligible for admission to the pre-nursing curriculum at the University; (2) they are graduates of the three-year program at one of the affiliated schools of nursing; and (3) they matriculated in one of the affiliated schools of nursing after the date on which it was accredited by the National League of Nursing Education.

Students entering the pre-nursing curriculum must meet the requirements for admission to the general curriculum of the College of Liberal Arts and Sciences, and, in addition, present credit in one year of elementary algebra and one year of plane geometry. Admission to the curriculum is restricted to students 16 to 28 years old. Students 28 to 33 years old may enter subject to approval of the nursing advisory committee. The specific requirements of the pre-nursing curriculum are as follows:

[1]The general zoology requirement may be met by Biology 101 and 131, or Biology 101 with a grade of "B."

	Semester Hours
Rhetoric and Composition	6
Social Sciences (including the equivalent of a course in sociology and a course in psychology)	12
Humanities	6
Chemistry (one year of general and one semester of organic chemistry)	10
Biological Sciences (including a course in bacteriology)	8
Physics (a course specially designed for nurses or a year of college physics)	4
Electives (one year of foreign language recommended)	14
Physical Education (four semesters)	
Total	60

Special advisers will confer with students enrolling in the pre-nursing curriculum before each student first registers.

PRE-VETERINARY CURRICULUM

The two-year pre-veterinary curriculum in the College of Liberal Arts and Sciences is followed by the four-year curriculum in the College of Veterinary Medicine in Urbana. Students applying for admission to the pre-veterinary curriculum must rank in the upper half of their high school graduating class. Students transferring with advanced standing must have maintained at least a 3.5 average in terms of the University's grading system. Students must maintain at least a 3.5 average to remain in the curriculum.

The specific requirements for admission to the College of Veterinary Medicine at Urbana are as follows:

	Semester Hours
Chemistry (including organic and quantitative analysis—Chem. 101, or 102, 105, 122, and 133)	16
Biological Sciences[1] (including botany and general zoology)	8
Physics (including laboratory—Phys. 101 and 102)	8
Foreign Language	6
Rhetoric and Composition (Rhet. 101 and 102)	6
Electives in not less than two of the following fields: economics, fine arts, language, geography, history, literature, philosophy, political science, psychology, sociology, speech. Approximately one-half of these credits should be in social sciences	9
Free electives	7
Total	60

The pre-veterinary curriculum is extremely rigid and failure to register in the prescribed courses in the proper sequence may result in additional time.

[1]The biological sciences requirement may be met by Biology 101 and 131.

The unseen world—microbiology

PRE-LAW CURRICULUM

The pre-legal courses constitute a highly important phase of the education of students planning the study of law, and this work should be planned with care. Students contemplating the study of law are advised to consult with the Student Counseling Bureau at the Chicago Undergraduate Division relative to their interests and aptitudes for law.

Students taking the curriculum leading toward degrees in both liberal arts and law should comply with the graduation requirements in the general curriculum. Such students are urged to complete all of these requirements before entering the College of Law except the minor and advanced hours.

The prospective law student is advised to choose his work, beyond those subjects prescribed in liberal arts, from among the following fields: English, with special emphasis on rhetoric and speech; political science; history, with emphasis on American and English constitutional history; economics; philosophy, and particularly logic; Latin; psychology; sociology; mathematics; and accountancy.

HOME ECONOMICS

Students planning to major in home economics may profitably attend the Chicago Undergraduate Division for one year. Courses for the freshman program in home economics should be chosen only after consultation with the Dean of the College of Liberal Arts and Sciences.

TEACHER-TRAINING CURRICULA

Of the curricula in teacher-training which have been approved by the College of Liberal Arts and Sciences, preliminary work in twelve curricula is offered at the Chicago Undergraduate Division as follows: biology, chemistry, English, French, geography, German, mathematics, mathematics and physical sciences, physics, social studies, Spanish, speech, and speech correction. In order to meet graduation and state certification requirements, these curricula are relatively rigid and failure to take the prescribed courses of the first two years within that time may result in an additional semester of undergraduate work.

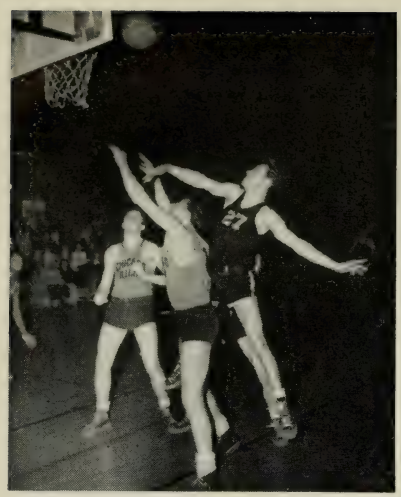
The first two years of elementary education curriculum, which is designed to meet the requirements for teaching in the elementary and kindergarten-primary grades of Illinois schools, are also administered by this college.

PRE-JOURNALISM CURRICULUM

Students planning to enter the School of Journalism and Communications are advised to register as pre-journalism freshmen and sophomores following the general curriculum in the College of Liberal Arts and Sciences. Courses in English literature and rhetoric, foreign languages, physical sciences, and social studies are recommended as desirable preparation for the profession of journalism. The ability to use a typewriter should be acquired before entering this school.

For admission to the School of Journalism and Communications as a candidate for a degree, a student must have completed 56 semester hours of work in one of the undergraduate curricula, exclusive of required courses in physical education and military science, with an average grade of 3.5 (one-half of the college work with an average grade of "B" and one-half with an average grade of "C"). An applicant for admission will find it to his advantage to include in his pre-journalism curriculum at least six hours of rhetoric and composition, twelve hours of history, political science, economics, and sociology, and ten hours of science, including mathematics.

The School of Journalism and Communications offers the following curricula; editorial, advertising, publication management, and radio.



Basketball

PHYSICAL EDUCATION

All students entering the University as freshmen are required to obtain four hours of credit in physical education. Each student is given a health examination and a motor fitness test before registration. The findings by the Health Service and the testing division are used as a basis for prescribing each student's immediate physical education program. Students with handicapping physical defects are assigned to special courses such as adapted sports and prescribed activities. Students with low scores in motor fitness are assigned to basic physical fitness courses.

Students who are organically sound and demonstrate a fair degree of motor fitness are permitted to elect from a variety of activity courses. All general courses in physical education meet three times a week for one hour or two times a week for 1½ hours. All general courses in physical education carry one hour of credit.

Women students entering the University as freshmen are required to obtain credit for four semester hours of work in physical education; those entering the University with sophomore standing are required to obtain credit for two semesters of work in physical education. Women are offered instruction in elementary, intermediate, and advanced rhythms, individual gymnastics, basketball, volleyball, softball, badminton, tumbling, apparatus stunts, fundamentals of motor fitness, archery, games for school and playground, folk and square dance, boating and fishing, swimming, golf, and bowling. Women's physical education classes are held in the Auditorium at the east end of the Pier. Through the Women's Athletic Association and Orchesis, the modern dance group, women students are offered wide opportunities for extracurricular activities in sports and the dance.

Men students entering the University with less than 56 semester hours credit are required to secure four semesters of credit in physical education, including the amount transferred. In addition to intercollegiate and intramural athletics, men students in the physical education classes are offered instruction in volleyball, badminton, swimming, individual tumbling, double tumbling, apparatus stunts, boxing, wrestling, weight lifting, archery, boating and fishing, personal defense activities, and a basic physical fitness program.

Veteran students who have fulfilled the four-hour physical education requirement while in the service are exempted from taking physical education. Veterans are encouraged to utilize the physical education facilities, but additional credit will not be granted except as elective credit in the College of Commerce.

In addition to the service program, the Physical Education Department offers the first two years of the professional training curricula leading to the degrees of Bachelor of Science in Physical Education, in Health Education, and in Recreation. Complete information concerning the professional training curricula is available at the office of the Director of Physical Education.

ARMY RESERVE OFFICERS' TRAINING CORPS

Authorization

The Reserve Officers' Training Corps (ROTC) is organized under authority of the Act of Congress of June 3, 1916, and was activated at the University of Illinois, Chicago Undergraduate Division, in September, 1950.

Educational Aim

The fundamental educational aim of the ROTC is to make the student conscious of his duties and responsibilities to his government as a citizen of this nation and, to so prepare him, that in time of national emergency he can fulfill his responsibility in accordance with his training and capabilities.

The broad aspect of the military training program gives the student a training which is as valuable to him in his civilian career as it is in his service to his country in time of emergency. The program offers a wide variety of work that is fundamental in nature. It should instill in the student an endelible impression of the place of the armed forces in the American democracy, and of the extent to which our military organization is dependent on the productive capacity of the nation.

Physical Training

A military unit is largely dependent for its efficiency upon the physical fitness of the individuals composing it. Therefore, it is the policy to encourage and support the physical training given by civilian instructors.

Participation

The ROTC Course is offered to qualified male students on a volunteer basis. Qualifications for enrollment in the ROTC are that the student be:

1. Regularly enrolled in the University.
2. A citizen of the United States.
3. Within specified age limits.
4. Physically qualified.
5. Approved by the Professor of Military Science and Tactics.

Program of Instruction

College level ROTC instruction is divided into two parts: the basic course, which comprises the first two years of the program, and the advanced course, comprising the last two years of the program. Only the first three years of this program are offered at the Chicago Undergraduate Division.

Basic Course

The first two years of military training are designated as the Basic Course. Students in the basic course will devote three hours a week to military instruction which will consist of two hours of class room instruction and one hour of drill. Accreditation for the Basic Course is one hour per semester. A student entering the University of Illinois from a high school or preparatory school which has an accredited Junior Division ROTC program may be granted advance standing in the Basic Course not to exceed one-third of the number of terms or semesters of the Junior Division ROTC successfully completed. A Department of Defense Form No. 68, prepared by the Professor of Military Science and Tactics of the institution previously attended, must be submitted to the Military Science Department prior to registration or must be in the hands of the student concerned at the time of registration. Students intending to enroll in the Basic Course must not have reached the age of twenty-three at the time of enrollment.

Advanced Course

The Advanced Course of the ROTC leads to a Reserve or Regular commission in the Army. The first year of Advanced Course training in Infantry, Artillery, and Engineers is offered to students who have successfully completed the two-year Basic Course or to veterans of the Army, Air Force, Navy and Marine Corps who have completed one year of active service in the Armed Forces and have been honorably discharged.

Students enrolling initially in the Advanced Course must not have reached their twenty-seventh birthday at the time of enrollment. Any student desiring entrance into the Advanced Course must be prepared to complete the course. The objective of the Advanced Course is to produce college-trained junior officers to meet the needs of the Army Reserve, National Guard, and Regular units.

The Advanced Course consists of five hours of instruction per week, four of which will be classroom instruction and one hour of drill. Accreditation for the Advanced Course is three credit hours per semester. All candidates for a Reserve commission must have reached an age of not less than twenty-one years, completed four years of education at college or university level, and successfully completed the Advanced Course which includes a summer encampment. The encampment is of approximately six weeks duration and is usually held at the end of the first year of the Advanced Course. Students completing all requirements for a Reserve commission but who have not reached the age of twenty-one will be given a certificate of capacity and a temporary commission and will receive the Reserve Officer Commission shortly after their twenty-first birthday. Those with distinguished records in ROTC are selected for consideration for Regular commission in the Army.

All members of the Advanced Course will receive the following:

1. Monetary allowance in lieu of subsistence.
2. Officer-type uniform.
3. The pay of the seventh enlisted grade while at the advanced summer encampment.
4. All necessary texts and materials on a loan basis.

Deferment

Deferment from Selective Service is granted for completion of the four-year course to those students who are qualified and approved by a deferment board composed of military and civilian faculty personnel. Deferred students will retain their deferment throughout their course in military, provided they maintain the required standards.

Clothing and Equipment

All students enrolled in the ROTC, including the Basic Course, receive an Army officer-type uniform, text books, notebooks, paper and pencils at Government expense. Equipment and supplies are provided on a loan basis and must be returned at the close of the school year. A deposit of $10.00 is required prior to the issue of equipment. This deposit, through the Military Property Custodian, is refundable at the close of the school year.

COURSES OF INSTRUCTION

Accountancy

101. PRINCIPLES OF ACCOUNTING. Simple transactions, general ledger accounts, books of original entry, closing process, trial balances, financial statements, accounting for negotiable instruments, controlling accounts, adjusting entries. Students who present one unit of bookkeeping for entrance will not be allowed credit for Accountancy 101, and should register in Accountancy 102. I, II; 3. Students with 95 or more credit hours receive only 2 hours credit.

102. PRINCIPLES OF ACCOUNTING. Similar to Accountancy 101. For those who present one unit of entrance credit in bookkeeping. Students who have failed in Accountancy 101 are permitted to register in Accountancy 102 and receive credit as in Accountancy 101 if their final grade is "C" or above. I, II; 2. Students with 95 or more credit hours receive only 1 hour credit.

105. ACCOUNTING PROCEDURE. Relation of business documents to the accounts; fundamentals of partnership and corporation accounting; business forms and records; financial statement analysis. I, II; 3. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: Accountancy 101 or 102.

106 ELEMENTARY COST ACCOUNTING. Accounting for production management. Principles and methods of accounting for managerial control of costs of production. I, II; 3. Prerequisite: One year of accountancy; sophomore standing; credit or registration in Economics 102 or 108.

108. INTERMEDIATE ACCOUNTING. Consideration at the intermediate level of accounts and transactions peculiar to the partnership and corporation types of organization; interpretation of financial statements and analysis of the principal accounts represented therein. I, II; 3. Prerequisite: Credit or registration in Accountancy 106.

Architecture

101. INTRODUCTION TO ARCHITECTURE. Introduction to the building industry and the profession of architecture, exercises illustrating basic architectural forms and their organization. I. II; 3.

113. HISTORY OF ANCIENT ARCHITECTURE. A description and analysis of the development of the architecture of the ancient East, Greece, and Rome, related to the environmental and cultural setting. I, II; 2. Prerequisite: Architecture 131, or sophomore standing.

131. ARCHITECTURAL DESIGN. Beginning study of architectural planning and designing. Fundamentals of sketching and presentation. I. II; 3. Prerequisite: Architecture 101 and registration in General Engineering Drawing 108.

132. ARCHITECTURAL DESIGN. Continuation of the fundamentals of architectural design. I, II; 3. Prerequisite: Architecture 131, or consent of instructor.

133. ARCHITECTURAL DESIGN. Continued study of architectural planning and designing; principles of plan, elevation, and section in small buildings. I, II; 3. Prerequisite: Architecture 132.

134. ARCHITECTURAL DESIGN. Continuation of Architecture 133. I. II; 3. Prerequisite: Architecture 133.

141. MATERIALS AND METHODS OF CONSTRUCTION I. Wood frame construction as used in houses; manufacture and performance characteristics of materials; framing systems; typical details; finishing materials. I. II; 2. Prerequisite: Registration in Architecture 131.

142. MATERIALS AND METHODS OF CONSTRUCTION II. Non-fire resistance construction; manufacture and performance characteristics of materials; support systems; typical details; finishing materials. Lectures, drawings. I, II; 2. Prerequisite: Architecture 141.

Art

111. INTRODUCTION TO ANCIENT AND MEDIEVAL ART. Cultural analysis of the inter-related fields of architecture, sculpture, painting, and other humanistic studies previous to the Italian Renaissance. I, II; 3.
112. INTRODUCTION TO RENAISSANCE AND MODERN ART. Cultural analysis of the inter-related fields of architecture, sculpture, painting, and other humanistic studies beginning with the Italian Renaissance and continuing through the modern period. I, II; 3.
115. ART APPRECIATION. An introduction to the factors inherent in architecture, sculpture, painting, and other arts. Primarily for non-art students. I, II; 3.
181. FREEHAND DRAWING. Simple groups of block form, still life, and casts in pencil and charcoal. Primarily for students in architecture and landscape architecture I, II; 2.
182. FREEHAND DRAWING. Simple groups of block form, still life, and casts in pencil and charcoal. Primarily for students in architecture and landscape architecture. I, II; 2. Prerequisite: Art 181.
183. FREEHAND DRAWING. Charcoal drawing from the cast; water color. Primarily for students in architecture and landscape architecture. I, II; 2. Prerequisite: Art 182.
184. FREEHAND DRAWING. Charcoal drawing from the cast; water color. Primarily for students in architecture and landscape architecture. I, II; 2. Prerequisite: Art 183.

Biological Sciences

101. FUNDAMENTALS OF BIOLOGY. This course is designed to give a fundamental understanding of plant and animal life and their reproduction. It is not a survey of the plant and animal kingdoms, but is rather a scientific examination of the manner and means whereby plants and animals live and reproduce their kind. Lectures, laboratory, and quiz. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit.
111. GENERAL BOTANY. A survey of the plant kingdom. The morphology and physiology of representative plants from Thallophytes through Angiosperms are considered in building up a system of natural classification based upon phylogenetic relationships. The importance of plants in the system of nature and human economics is emphasized. Lectures, laboratory, and quiz. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Biology 101.
115. INTRODUCTORY SYSTEMATIC BOTANY (PLANT TAXONOMY). Classification and identification of flowering plants, with special reference to the local flora, and the needs of high school teachers. Occasional field trips required. Lectures, laboratory, and quiz. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Biology 101 and 111.
116. ECONOMIC BOTANY. Lectures and demonstrations of the uses of plants and plant products by man. The origin and distribution of native and cultivated plants and their relation to human history. Forest, drug, food textile, beverage, and other industrial institutions. Lectures and discussion. II; 3. Prerequisite: Biology 101 and 111.
121. MICROBIOLOGY. A study of microorganisms and their role in the system of nature. Among the mocroorganisms are included the viruses and the microscopic multicellular plants and animals, as well as the protozoa and bacteria. Primary emphasis will be placed upon the bacteria. The systematic evolutionary, physiological, and ecological relationships of these organisms with both plant and animal worlds will be considered. Lectures, laboratory and quiz. I, II; 4. Prerequisite: Biology 101.

126. ADVANCED GENERAL BACTERIOLOGY. General technic, special apparatus, and methods. Lectures, laboratory, and quiz. II; 4. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Biology 101 and 121; credit or registration in Chemistry 105.

131. GENERAL ZOOLOGY. A survey of the animal kingdom, the phylogenetic relationships of animals and classification. Emphasis is placed upon economically important and parasitic forms. Lectures, laboratory, and quiz. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Biology 101.

132. COMPARATIVE VERTEBRATE ANATOMY. Classification and distribution of the vertebrate animals. Comparative anatomy of organs and organ systems, their function and evolution. Lectures, laboratory, and quiz. I, II; 5. Prerequisite: Biology 101 and 131, or Biology 101 with a grade of "B".

136. BIRD STUDY. Native birds; their identification, food relations, seasonal distribution, migration activities, economic importance, and conservation. II; 2.

141. VERTEBRATE PHYSIOLOGY. This course is designed to furnish an understanding of the basic physiological activities of the vertebrate organism. Lectures, laboratory, and quiz. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Biology 101.

142. PHYSIOLOGY OF THE NERVOUS SYSTEM. This course is planned to give an understanding of the physiological activities by which the nervous system carries out its functions. Recommended as background for students of psychology, education, or biological sciences. Lectures, laboratory, and quiz. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Biology 101 and 141.

333. VERTEBRATE EMBRYOLOGY. The development of the vertebrate body and its organs. Lectures, laboratory, and quiz. I, II; 5. Prerequisite: Biology 101 and 132; junior standing.

Business Law

100. BASIC PRINCIPLES OF BUSINESS LAW. Basic principles in business law, covering the subjects of contracts, sales, negotiable instruments, and agency. Credit toward graduation will not be given for Business Law 201, 202, or 261 in addition to Business Law 100. I, II; 3. Prerequisite: Accountancy 105; Economics 102; forty-five credit hours.

Chemistry

101. GENERAL CHEMISTRY. For students who have no entrance credit in high school chemistry, or whose preparation is inadequate for Chemistry 102. I, II; 5. Students with 95 or more credit hours receive only 3 hours credit. Students who have received entrance credit for high school chemistry are given only 3 hours credit for Chemistry 101. Prerequisite: One unit of entrance credit in physics, or 2½ units of entrance credit in mathematics, or credit in Mathematics 111 or 112.

102. GENERAL CHEMISTRY. For students who have one year of high school chemistry. I, II; 3. Students with 95 or more credit hours receive only 2 hours credit. Students who have not used their high school chemistry for entrance may receive 5 hours credit for Chemistry 102 if they complete the course with a grade of "C" or higher. Prerequisite: One unit of entrance credit in chemistry or equivalent.

103. GENERAL CHEMISTRY. Lectures, recitations, and laboratory. For engineering students who have had no chemistry. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. Students who have received entrance credit for high school chemistry are given only 3 hours credit in Chemistry 103. Prerequisite: One unit of entrance credit in physics, or 2½ units of entrance credit in mathematics, or credit in Mathematics 111 or 112.

104. CHEMISTRY OF THE METALLIC ELEMENTS. Lectures, recitations, and laboratory. Limited to students in the engineering curricula. I, II; 4. Credit in Chemistry 104 will not be granted to students who have received credit in Chemistry 105 or 106. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Chemistry 101, 102, or 103.

105. INORGANIC CHEMISTRY AND QUALITATIVE ANALYSIS. Lectures, recitations, and laboratory. For students in the ceramic engineering curriculum and for students who are not eligible for Chemistry 104 or 106. I, II; 5. Credit in Chemistry 105 will not be granted to students who have received credit in Chemistry 104 or 106. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Chemistry 101, 102, or 103.

106. INORGANIC CHEMISTRY. Metallic elements. For students in the chemistry curriculum, and for chemistry majors who are not pre-medical students. I, II, 5. Credit in Chemistry 106 will not be granted to students who have received credit in Chemistry 104 or 105. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Chemistry 101, 102, or 103.

107. GENERAL CHEMISTRY. For students in the curriculum of chemistry or chemical engineering. Lectures, recitations, and laboratory. I; 5. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Excellent high school background in chemistry as shown by a placement examination.

108. GENERAL CHEMISTRY AND QUALITATIVE ANALYSIS. For students in the curriculum of chemistry or chemical engineering. Lectures, recitations, and laboratory. II; 5. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Chemistry 107.

110. QUALITATIVE ANALYSIS. Qualitative analysis of metals and inorganic compounds. Open to all students; required of students whose major is chemistry or chemical engineering and those registered in the curriculum of chemistry except students who qualify for Chemistry 107 and 108. I, II; 5. Prerequisite: Chemistry 106.

122. ELEMENTARY QUANTITATIVE ANALYSIS. Gavimetric and volumetric analysis, stoichiometrical relations, practical applications. I, II; 5. Prerequisite: Chemistry 104, 105, or 106.

124. QUANTITATIVE ANALYSIS. For all students in the Chemistry curriculum and Chemical Engineering. I, II; 5. Prerequisite: Chemistry 110 or satisfactory record in Chemistry 107 and 108.

133. ELEMENTARY ORGANIC CHEMISTRY. To fulfill the requirements for pre-medical, pre-dental, pre-veterinary, dietetics, and home economics students. Lectures, recitations, and laboratory. I, II; 5. Prerequisite: Chemistry 105 or 110.

196. GENERAL CHEMISTRY. Designed to give a cultural background with particular emphasis upon recent developments in several fields of chemistry. Chemistry 196 and 197 is an approved sequence in general education. Lectures, recitations, and laboratory. I; 4. Prerequisite: Two units of high school mathematics.

197. GENERAL CHEMISTRY. Continuation of Chemistry 196. A student with a grade of "C" or better in Chemistry 197 may be admitted to Chemistry 104, 105, or 106. Credit for Chemistry 196, 197 and 104, 105, or 106 shall not exceed ten hours. II; 4. Prerequisite: Chemistry 196.

247. ELEMENTARY PHYSICAL CHEMISTRY. For pre-medical students only. Lectures and laboratory. I, II; 4. Prerequisite: Chemistry 122 and 133; Physics 102 or 104, or equivalent.

Civil Engineering

101. SURVEYING THEORY. Theoretical aspects of plane and topographic surveying, land surveying; computation of areas and volumes. First three weeks of summer session. S; 3. Prerequisite: General Engineering Drawing 101 or 104; Mathematics 114.

102. SURVEYING PRACTICE. Field practice of plane and topographic surveying. The use of the level, transit and tape in making engineering surveys and topographic maps. Last five weeks of summer term. At summer camp only. S; 4. Prerequisite: Civil Engineering 101, or concurrent registration therein.

103. ROUTE SURVEYING. Principles of the economic location of railways and highways; horizontal and vertical alinement for route projects; computations for earthwork quantities and distribution; railway track turnouts. I, II; 3. Prerequisite: Credit in civil engineering summer camp.

115. GENERAL SURVEYING. Use and care of surveying instruments; methods of making engineering surveys; computations of areas and volumes; contour problems; transit stadia mapping methods. I, II; 3. Prerequisite: General Engineering Drawing 101 or 104; Mathematics 114.

160 BUILDING CONSTRUCTION. Materials, types of construction, and details for buildings. I, II; 3. Prerequisite: Sophomore standing.

235. PLAIN CONCRETE. Production, properties, specification requirements and uses of Portland cement, aggregates, mixing water, and admixtures; proportioning; field practice in the production of concrete; laboratory practice including tests on materials and concrete of various proportions; calculations and graphs based on values from concrete proportioning projects. I, II; 2. Prerequisite: Sophomore standing in engineering, architecture, or landscape architecture.

Economics

100. INTRODUCTION TO BUSINESS. An introductory course on the principles and practices of our economic system from the point of view of the business manager. Open to freshmen only. I, II; 3.

102. PRINCIPLES OF ECONOMICS. Principles of production, supply, demand, value, price, distribution. I, II; 3. Prerequisite: One year of university work.

103. PRINCIPLES OF ECONOMICS. Principles of economics as applied to exchange, money, banking, price changes, governmental finance, etc. I, II; 3. Prerequisite: Economics 102.

108. ELEMENTS OF ECONOMICS. A brief presentation of price determination, international trade and exchange, money and banking, and public finance. For non-commerce students only. Not open to those who have had Economics 102 and 103. I, II; 3. Prerequisite: One year of university work.

136. ECONOMIC HISTORY OF THE UNITED STATES. Main events and leading personalities in the economic development of the United States as seen in the westward movement, the growth of industry, agriculture, commerce, finance, transportation, the trust movement, and labor, 1790—Present. Open to freshmen only. I, II; 3.

138. INTRODUCTION TO THE ECONOMIC HISTORY OF MODERN EUROPE. The evolution of the economic institutions of modern Europe in relation to the development of industry, commerce, transportation, and finance in the principal European nations. I, II; 3.

170. ELEMENTS OF STATISTICS. Methods of collection—presentation and interpretation of quantitative economic data, averages, dispersion, index numbers, reliability of statistics, time series analysis, and simple correlation. I, II; 3. Prerequisite: Economics 102 or 108; sophomore standing.

Education

100. THE AMERICAN PUBLIC SCHOOL. Introduction to the study of education. I, II; 2. Prerequisite: Sophomore standing.

101. NATURE OF THE TEACHING PROFESSION: AN ORIENTATION COURSE. This course is designed to help the student get answers to the questions: "What does education in its various branches have to offer?" and "What preparation in general education, subject matter fields, and professional educarion is required or desirable?" Through an extensive testing and counseling program this course is designed to help the student evaluate his potentialities and problems with reference to becoming a teacher. I, II; 2.

109. EDUCATIONAL PSYCHOLOGY. The basic undergraduate course in psychology of education for prospective teachers. Materials and principles from the various areas of psychology (mental hygiene, learning, etc.) are applied to the practical problems of teaching. I, II; 3. Prerequisite: Psychology 100.

Electrical Engineering

114. WIRING AND ILLUMINATION. Fundamentals of commercial and industrial illumination and wiring practice. Open to architecture and architectural engineering students only. I, II; 3. Prerequisite: Sophomore standing, or consent of instructor.

120. ILLUMINATION ENGINEERING AND SECONDARY POWER DISTRIBUTION. Fundamentals of illumination engineering practice and principles of commercial and industrial wiring. Lighting installation design; theory and design of branches, sub-feeders, and feeders for power and light distribution systems. I, II; 3. Open to non-engineering students. Prerequisite: Sophomore standing or consent of instructor.

126. ELECTRIC CIRCUITS AND FIELDS. Study of units and relations in electric and magnetic circuits and fields. Basic concepts of circuit parameters. I, II; 4. Prerequisite: Physics 103; Mathematics 132; credit or registration in Physics 104 and Mathematics 142.

English

101. INTRODUCTION TO POETRY. Understanding of poetry through the reading and discussion of representative poems. I, II; 3. Students with 95 or more credit hours receive only 2 hours credit. Note: Credit is not given for English 101, 102, and 103 in addition to English 121 and 122. This course, plus English 102 and 103, satisfies the humanities requirement in general education.

102. INTRODUCTION TO DRAMA. Understanding of drama through the reading and discussion of representative plays. The reading list will include selections from Greek, Elizabethan, and modern English, continental, and American drama. I, II; 3. Students with 95 or more credit hours receive only 2 hours credit. See note under English 101.

103. INTRODUCTION TO FICTION. Understanding of fiction through the reading and discussion of representative short stories and novels. The reading list will include Jane Austen's *Pride and Prejudice*, Balzac's *Pere Goriot*, Dostoyevsky's *Crime and Punishment*, E. M. Forster's *A Passage to India*, and Hemingway's *A Farewell to Arms*. I, II; 3. Students with 95 or more credit hours receive only 2 hours credit. See note under English 101.

113. AMERICAN LITERATURE. A survey of American literature with lectures on the historical and cultural background. From 1620 to the Civil War. I, II; 3. Prerequisite: Sophomore standing, or exemption from Rhetoric 102.

114. AMERICAN LITERATURE. A survey of American literature with lectures on the historical and cultural background. From the Civil War to the 20th Century. I, II; 3. Prerequisite: Sophomore standing, or exemption from Rhetoric 102.

121. CHIEF ENGLISH WRITERS BEFORE 1800. *Canterbury Tales*, *Utopia*, three plays of Shakespeare, *Paradise Lost*, *Gulliver's Travels*, *Tom Jones*, *Life of Johnson*, *Rasselas*. Particularly recommended for students in professional and technical courses such as law, medicine, commerce, engineering, etc. Credit is not given for English 121 in addition to English 101, 102, and 103. This course, plus English 122, satisfies the humanities requirement in general education. I, II; 4. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

122. CHIEF ENGLISH WRITERS OF THE NINETEENTH CENTURY. Wordsworth, Byron, Carlyle's *Past and Present*, Arnold's prose and poetry, FitzGerald's *The Rubaiyat of Omar Khayyam*, readings from T. H. Huxley, Browning's poems, and two novels. Particularly recommended for students in professional and technical courses, such as law, medicine, commerce, engineering, etc. Credit is not given for English 122 in addition to English 101, 102, and 103. This course, plus English 121, satisfies the humanities requirement in general education. I, II; 4. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

131. INTRODUCTION TO SHAKESPEARE. I, II; 3. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

144. CONTEMPORARY POETRY. American poetry from Whitman to Sandburg; and English poetry from the pre-Raphaelites to Masefield. II; 3. Prerequisite: Six hours of English literature, or junior standing.

French

101. ELEMENTARY COURSE. Grammar, pronunciation, reading of modern authors, composition, conversation. For students who have no credit in French. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. No credit for graduation is given for French 101 without French 102.

102. ELEMENTARY COURSE. Continuation of French 101. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: French 101, or one year of high school French.

103. MODERN FRENCH. Rapid reading of modern authors, syntax, and composition. I, II; 4. Prerequisite: French 102, or two years of high school French.

104. MODERN FRENCH. Continuation of French 103. I, II; 4. Prerequisite: French 103, or three years of high school French.

201. INTRODUCTION TO FRENCH LITERATURE. I; 3. Prerequisite: French 104, or four years of high school French.

202. INTRODUCTION TO FRENCH LITERATURE. II; 3. Prerequisite: French 104, or four years of high school French.

General Engineering Drawing

101. ELEMENTS OF DRAWING. Lettering; orthographic projection; working drawings; chart and diagram drawing; isometric and oblique drawing; freehand sketching; tracings; methods of reproducing drawings. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Plane geometry.

102. DESCRIPTIVE GEOMETRY. Theory of projections; solution of theoretical and practical problems involving size, shape, and relative position of common geometrical magnitudes such as points, lines, planes, curved surfaces, and solids; intersections, developments, shades and shadows, perspective drawing; I, II; 4. Prerequisite: Plane and solid geometry.

103. AIRCRAFT DRAFTING AND LOFTING. Aircraft terminology, control and reference surfaces and systems; sheet metal terminology and fabrication; drafting standards and types of drawings; drafting room manuals and standard handbooks; descriptive geometry applied to simple layouts and details; aircraft fastenings; lofting—plane, tapered, and double curved surfaces, airfoils, intersections; practices and standards. I, II; 3. Prerequisite: General Engineering Drawing 101 or 104, and 102.

104. ADVANCED DRAWING. Review of orthographic projection and working drawings; isometric, oblique, perspective, chart and diagram, topographical, architectural, and structural drawing. I, II; 4. Prerequisite: General Engineering Drawing 101, or substantial equivalent.

107. ARCHITECTURAL PROJECTIONS. Instrumentation; lettering; projection; intersections; conventions; shades and shadows. I, II; 2. Prerequisite: Plane geometry.

108. ARCHITECTURAL PROJECTIONS. Shades and shadows; oblique, isometric, and perspective drawings; developments. I, II; 2. Prerequisite: General Engineering Drawing 107.

210. INDUSTRIAL PRODUCTION ILLUSTRATION. Mechanical and freehand drawings in axonometric, oblique and perspective; shades and shadows; rendering of drawings with various media including some work with the airbrush; industrial production illustration. An approved elective in all engineering curricula. I, II; 3. Prerequisite: General Engineering Drawing 102, or 107 and 108.

212. GRAPHICAL CALCULATIONS. Use of various types of slide rules with special attention to the log-log scales; rectification of curves from laboratory data to devise empirical equations using various types of coordinate paper, construction and use of nomographs or alignment charts. For students in engineering; accepted as an approved elective in all engineering curricula. I, II; 1. Prerequisite: General Engineering Drawing 101, or equivalent; Mathematics 112, 114, and 122.

Geography

101. ELEMENTS OF GEOGRAPHY. The geographic point of view; elements of physical landscape; planetary relations, weather, climate, climatic regions, landforms, natural resources. Lectures, discussions, and quiz. I, II; 5. Students with 95 or more credit hours receive only 4 hours credit. Students with credit in Geography 104 receive only 4 hours credit.

104. WORLD REGIONAL GEOGRAPHY. Survey of the geographic structure of the world; regional patterns of settlement and land utilization; man's occupancy of the world. I, II; 3. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: Geography 101.

105. INTRODUCTORY ECONOMIC GEOGRAPHY. Man's utilization of the major economic resources of the world from the standpoint of geographic patterns. Primarily for commerce students but open to others except those having credit in Geography 106. I, II; 3. Students with 95 or more credit hours receive only 2 hours credit.

111. INTRODUCTORY METEOROLOGY. The atmosphere; its composition, functions, and behavior in the production of various weather types; air masses; application to present-day activities. Lectures and quiz. I, II; 3. Prerequisite: Geography 101, or consent of instructor.

123. GEOGRAPHY OF ILLINOIS. Detailed regional study of the state with special emphasis on the cultural relations of Illinois to the rest of the nation. II; 3. Prerequisite: Geography 101, or 104, or 106, or consent of instructor.

Geology

101. PHYSICAL GEOLOGY. Materials, structures, surface features of the earth and processes which have produced them. Lectures, quiz, and laboratory. One-half day field trip required. Geology 101 and 102 meet the general education requirement in the physical sciences. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit.
102. HISTORICAL GEOLOGY. Evolution of the earth and its life. Lectures and laboratory. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Geology 101, or Division of General Studies 141.
131. MINERALOGY. A systematic study of minerals and common rocks. Lecture and laboratory. I; 3. Prerequisite: One semester of college chemistry.
132. MINERALOGY. Continuation of Geology 131. A systematic study of minerals and common rocks. Lecture and laboratory. II; 3. Prerequisite: Geology 131.
150. GEOLOGY FOR ENGINEERS. I, II; 3. Prerequisite: Sophomore standing in the College of Engineering.

German

101. ELEMENTARY COURSE. Oral practice, reading, and grammar for beginners. Not open to students who have had high school credit in this language. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. No credit toward graduation is given for German 101 without German 102.
102. ELEMENTARY COURSE. Continuation of German 101. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: German 101, or one year of high school German.
103. INTERMEDIATE COURSE. Modern narrative prose. Oral practice and sight reading. I, II; 4. Prerequisite: German 102, or two years of high school German, or equivalent.
104. INTERMEDIATE COURSE. Continuation of German 103. Literary reading. Classical and modern narrative prose. Oral practice and sight reading. I, II; 4. Prerequisite: German 103, or three years of high school German, or equivalent.
113. PRACTICE IN CONVERSATION. Oral practice for the development of elementary skill in conversation and the improvement of pronunciation. This course is supplementary to German 103 and 104. I, II; 2. Prerequisite: German 102, or two years of high school German; concurrent registration in German. 103 or 104.
210. MASTERPIECES OF GERMAN LITERATURE. Introduction to German literature, its subjects, forms, and ideals. I, II; 3. Prerequisite: German 104, 144, two years of college German, or equivalent.

History

111. MODERN EUROPEAN HISTORY FROM THE RENAISSANCE TO 1815. Europe from the age of the great discoveries to the close of the Napoleonic wars. I; 4. Students with 95 or more credit hours receive only 3 hours credit.
112. MODERN EUROPEAN HISTORY, 1815 TO THE PRESENT. Development of European nationalism, liberalism, and imperialism; World War; reconstruction. II; 4. Students with 95 or more credit hours receive only 3 hours credit.
131. HISTORY OF ENGLAND TO 1688. History of the British peoples to 1688. I; 3. Students with 95 or more credit hours receive only 2 hours credit.
132. HISTORY OF ENGLAND, 1688 TO 1952. Modern history of the United Kingdom; colonial and imperial development. II; 3. Students with 95 or more credit hours receive only 2 hours credit.
151. HISTORY OF THE UNITED STATES TO 1865. Colonial foundations, the movement for independence, early years of the Republic. I; 3. Prerequisite: Sophomore standing.

152. HISTORY OF THE UNITED STATES, 1865 TO 1952. A century of national life and organization. I; 3. Prerequisite: Sophomore standing.
181. THE ANCIENT WORLD. Ancient empires and Greece. I; 3. Prerequisite: Sophomore standing.
182. THE ANCIENT WORLD. Rome. II; 3. Prerequisite: Sophomore standing.

Hygiene

102. PERSONAL AND ENVIRONMENTAL HYGIENE. Required of all undergraduate women during their first year of residence. I, II; 2. Students with 95 or more credit hours receive only 1 hour credit.
105. PERSONAL AND ENVIRONMENTAL HYGIENE. Required of all undergraduate men during their first year of residence. I, II; 2. Students with 95 or more credit hours receive only 1 hour credit.

Management

101. INDUSTRIAL ORGANIZATION AND MANAGEMENT. Organization plans, administrative policies, and management problems with special attention to manufacturing units. I, II; 3. Prerequisite: Economics 102, or 108, or consent of Associate Dean of the college.

Marketing

101. PRINCIPLES OF MARKETING. The functions, commodities, and middlemen involved in the marketing of goods and services; the policies and problems involved in the operation of market institutions. I, II; 3. Prerequisite: Economics 102, or 108, or consent of Associate Dean of the college.

Mathematics

101. BASIC MATHEMATICS. A systematic presentation of the fundamentals of arithmetic, algebra, plane geometry, trigonometry, and statistics. For Liberal Arts and Science students only. Required of students in the general curriculum of the College of Liberal Arts and Sciences whose entrance credits do not include one year of algebra and one year of plane geometry. II; 3.
102. BASIC MATHEMATICS. Continuation of Mathematics 101. I; 3. Prerequisite: Mathematics 101.
103. INTRODUCTION TO COLLEGE ALGEBRA. I, II; 3. Students having 1½ entrance units in algebra receive no credit. Students with 95 or more credit hours receive no credit.
104. ELEMENTS OF ALGEBRA AND TRIGONOMETRY. For premedical students who have entered with only one unit of high school algebra and who need credit in trigonometry as a prerequisite to physics. This course does not serve as a prerequisite for Mathematics 122. Premedical students who enter with 1½ units of algebra must take Mathematics 114. I, II; 3. Prerequisite: High school algebra, 1 unit; plane geometry, 1 unit.
106. SOLID GEOMETRY. Satisfies deficiency in solid geometry for engineering students; all other students receive full credit. I, II; 3. Prerequisite: Entrance algebra, 1 unit; plane geometry, 1 unit.
108. ELEMENTARY PLANE GEOMETRY FOR VETERANS. This course deals with the usual topics of high school geometry. It is designed as a refresher course for veterans who are deficient in this area of basic mathematics. Students may meet entrance requirements for the Colleges of Commerce and Engineering through this course. I, II; no credit.
109. FUNDAMENTALS OF MATHEMATICS. For students who do not specialize in mathematics. A survey of the character of mathematics as a subject and of its relations to science, art, philosophy, and knowledge in general. Mathematics 109 and 110 meet the physical science requirement in general education in Liberal Arts and Sciences. I, II; 4. Prerequisite: Consent of the department.

110. FUNDAMENTALS OF MATHEMATICS. For students who do not specialize in mathematics. A survey of the character of mathematics as a subject and of its relations to science, art, philosophy, and knowledge in general. Mathematics 109 and 110 meet the physical science requirement in general education in Liberal Arts and Sciences. II; 4. Prerequisite: Mathematics 109.

112. COLLEGE ALGEBRA. I, II; 3. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: Entrance algebra, 1½ units, or Mathematics 103; plane geometry, 1 unit, or Mathematics 108.

114. PLANE TRIGONOMETRY. I, II; 2. Students with 95 or more credit hours receive only 1 hour credit. Prerequisite: Entrance algebra, 1½ units, or Mathematics 103; plane geometry, 1 unit, or Mathematics 108.

117. COMBINED FRESHMAN MATHEMATICS. A combined course integrat- all the usual topics of algebra, trigonometry, and analytic geometry, and also some topics of differential calculus. For students of chemistry, chemical engineering, ceramic engineering, ceramics, and architecture. I; 5. Prerequisite: Entrance algebra, 1½ units; plane geometry, 1 unit.

122. ANALYTIC GEOMETRY. Plane and solid analytic geometry. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Mathematics 111 or 112, and 114 or 115.

123. ANALYTIC GEOMETRY. Plane and solid analytic geometry. I, II; 5. Students with 95 or more credit hours receive only 4 hours credit. Prerequisite: Mathematics 111 or 112, 114 or 115.

127. COMBINED FRESHMAN MATHEMATICS. Continuation of Mathematics 117. I, II; 4. Prerequisite: Mathematics 117.

132. CALCULUS. First course for students of mathematics and engineering. I, II; 5. Prerequisite: Mathematics 122.

137. CALCULUS. For students of chemistry, chemical engineering, ceramics, ceramic engineering, and architecture. I; 3. Prerequisite: Mathematics 117 and 127, or consent of department.

142. CALCULUS. Second course for students of mathematics and engineering. I, I;; 3. Prerequisite: Mathematics 132.

147. CALCULUS. Continuation of Mathematics 137. II; 3. Prerequisite: Mathematics 137.

161. STATISTICS. II; 3. Prerequisite: Mathematics 111 or 112; sophomore standing.

341. DIFFERENTIAL EQUATIONS. II; 3. Prerequisite: Mathematics 132 and 142, or 137 and 147.

Mechanical Engineering

171. MECHANISM. A study of the transmission and modification of motion by linkwork, cams, gears, belts, ropes, chains, etc.; theory of gear tooth action; gear tooth systems and production methods; point paths, displacement diagrams. I, II; 2. Prerequisite: General Engineering Drawing 101; registration in Physics 103.

182. MANUFACTURING PROCESSES. Foundry practice; pattern design; hot and cold forming. Welding and allied processes; machine tools and machining practice; use of jigs, fixtures, and tools for manufacture of interchangeable parts. Classroom discussion and demonstrations. I, II; 3. Prerequisite: Sophomore standing in aeronautical engineering, or consent of instructor.

183. MATERIALS CASTING. Casting as a process of fabrication; the molding process including machine molding; molding sands characteristics, control, and testing. Melting and pouring practice. Physical characteristics of cast materials, advantages, and disadvantages; tray iron structures and elementary metallurgical concepts; design of wood and metal patterns and correlation with foundry practice; core requirements control and testing. I, II; 3. Prerequisite: General Engineering Drawing 101 or 104; sophomore standing.

184. METAL PROCESSING. Basic machining processes used for metal processing. Use of machine tools, jigs, fixtures, gages, and measuring instruments and inspection methods to produce interchangeable metal parts. I, II; 3. Prerequisite: General Engineering Drawing 101 or 104; sophomore standing.

Military Science and Tactics

101. FRESHMAN DRILL AND THEORY. Basic military instruction to include military policy; military organization; evolution of warfare; maps; and leadership, drill and command. I; 1. Prerequisite: Military Science Department approval.
102. FRESHMAN DRILL AND THEORY. Basic military instruction to include military psychology and personnel management, geographical foundations of national power, military problems of the United States; and leadership, drill and command. II; 1. Prerequisite: Military Science 101 or equivalent.
103. INFANTRY SOPHOMORE DRILL AND THEORY. Basic infantry instruction to include leadership, drill, and exercise of command, organization of infantry units, weapons, marksmanship, technique of fire of rifle squad, combat formations, scouting and patrolling, tactics of rifle squad. I; 1. Prerequisite: Military Science 102 or equivalent.
104. INFANTRY SOPHOMORE DRILL AND THEORY. Continuation of Military Science 103. II; 1. Prerequisite: Military Science 103 or equivalent.
133. ENGINEER SOPHOMORE DRILL AND THEORY. History and tradition of the Corps of Engineers, characteristics of weapons, camouflage explosives and demolitions, hand tools, mines, tactics and field fortifications. I; 1. Prerequisite: Military Science 102 or equivalent.
134. ENGINEER SOPHOMORE DRILL AND THEORY. Continuation of Military Science 133. II; 1. Prerequisite: Military Science 133.
163. ARTILLERY (ANTIAIRCRAFT) SOPHOMORE DRILL AND THEORY. Introduction, characteristics, and service of the piece of AAA automatic weapons and 90-mm AAA guns. I; 1. Prerequisite: Military Science 102 or equivalent.
164. ARTILLERY (ANTIAIRCRAFT) SOPHOMORE DRILL AND THEORY. Continuation of Military Science 163. II; 1. Prerequisite: Military Science 163.
235. CORPS OF ENGINEERS JUNIOR DRILL AND THEORY. Advanced instruction in Corps of Engineers to include bridge design and classification, engineer signal communications, engineer combat intelligence, engineer supply, military roads and runways, organization of engineer units, organization of combat divisions, tactics of engineer units, vehicle operations and maintenance, water supply and individual weapons and marksmanship. I; 3. Prerequisite: Military Science 134 or equivalent. Open to students pursuing any engineering curricula or applied course such as geology, chemistry, physics, etc.
236. CORPS OF ENGINEERS JUNIOR DRILL AND THEORY. Continuation of Military Science 235. II; 3. Prerequisite: Military Science 235.
265. ARTILLERY (ANTIAIRCRAFT) JUNIOR DRILL AND THEORY. Advanced antiaircraft artillery instruction to include AAA tactics, basic gunnery for AAA and automatic weapons, communications, individual weapons and marksmanship, motors and transportation, organization and troop movements. I; 3. Prerequisite: Military Science 164 or equivalent.
266. ARTILLERY (ANTIAIRCRAFT) JUNIOR DRILL AND THEORY. Continuation of Military Science 265. II; 3. Prerequisite: Military Science 265.

Philosophy

101. INTRODUCTION TO PHILOSOPHY. Discussion of problems in the field of morals, art, and knowledge, with selected readings from philosophers whose views have been influential in Western culture. I, II; 3. Prerequisite: Sophomore standing.

102. LOGIC. Reasoning, detection of fallacies, evidence. I, II; 3. Prerequisite: Sophomore standing.
105. MORAL IDEAS AND PRACTICE. I, II; 2. Credit is not given for both Philosophy 103 and 105. Prerequisite: Sophomore standing.

Physical Education for Men

101. PRESCRIBED EXERCISE. Prescribed ameliorative exercises adapted to individual needs, capacities, and interests. I, II; 1.
102. PRESCRIBED EXERCISE. Prescribed ameliorative exercises adapted to individual needs, capacities, and interests, I, II; 1.
103. PRESCRIBED EXERCISE. Prescribed ameliorative exercises adapted to individual needs, capacities, and interests. I, II; 1.
104. PRESCRIBED EXERCISE. Prescribed ameliorative exercises adapted to individual needs, capacities, and interests. I, II; 1.
106. DEVELOPMENTAL ACTIVITIES. Activities that contribute to the development and maintenance of physical fitness according to social and hygienic standards. I, II; 1.
108. BEGINNING SWIMMING. Skills, knowledge, attitudes, and conditions. S; 1. Open to non-swimmers.
112. INDIVIDUAL TUMBLING STUNTS. Skills, knowledge, attitudes, and conditions. I, II; 1.
113. DOUBLE TUMBLING STUNTS. Skills, knowledge, attitudes, and conditions. I, II; 1.
114. APPARATUS STUNTS. Skills, knowledge, attitudes, and conditions. I, II; 1.
117. BOXING. Skills, knowledge, attitudes, and conditions. I, II; 1.
118. WRESTLING. Skills, knowledge, attitudes, and conditions. I, II; 1.
120. PERSONAL DEFENSE ACTIVITIES. Skills, knowledge, attitudes, and conditions. I, II; 1.
123. WEIGHT LIFTING. Skills, knowledge, attitudes, and conditions. I, II; 1.
129. VOLLEYBALL. Skills, knowledge, attitudes, and conditions. I, II; 1.
132. ARCHERY. Skills, knowledge, attitudes, and conditions. I, II; 1.
136. BADMINTON. Skills, knowledge, attitudes, and conditions. I, II; 1.
139. BACKYARD SPORTS. Skills, knowledge, and conditions. I, II; 1.
140. BOATING AND FISHING. I, II; 1. Prerequisite: Two hours of credit in physical education and a score on the physical fitness test that allows the student a free choice of activities or approval of the Director of Physical Education.
143. AMERICAN SQUARE DANCE. I, II; 1.
150. PROFESSIONAL ORIENTATION. Introduction to the fields of physical education, athletics health, safety, recreation. For physical education majors. I, II; 2.
159. CAMP COUNSELING. Objectives, administration, counseling, activity programs, evaluation. I, II; 3.

Physical Education for Women

100. CONDITIONING ACTIVITIES. I, II; 1.
101. INDIVIDUAL GYMNASTICS. Recommendation from the Department of Health Service is necessary for registration in this course. I, II; 1.
102. MODIFIED ACTIVITIES. Prescribed recreational sports, relaxation, and exercise. I, II; 1. Prerequisite: Recommendation from the Department of Health Service.
105. ELEMENTARY RHYTHMS. I, II; 1.

106. INTERMEDIATE RHYTHMS. I, II; 1. Prerequisite: Physical Education for Women 105, or consent of instructor.
107. ADVANCED RHYTHMS. An opportunity for those who have completed previous work to further their skills in muscular control and extend their creative interests and appreciations of art through the medium of the dance. I, II; 1. Prerequisite: Physical Education for Women 105 and 106, or consent of instructor.
110. ELEMENTARY SWIMMING. S; 1.
123. BASKETBALL. I, II; 1.
124. VOLLEYBALL. I, II; 1.
125. SOFTBALL. I, II; 1.
130. BADMINTON. I, II; 1.
131. GOLF. Personal equipment to be furnished by student. I, II; 1.
132. BOWLING. S; 1.
135. ARCHERY. I, II; 1.
140. BOATING AND FISHING. Open to students who have completed two semesters of physical education. I, II; 1.
141. TUMBLING AND APPARATUS STUNTS. The side horse, parallel bars, stall bars, buck, etc. are used to develop skills in balance and coordination on apparatus. Attention is directed toward safety factors necessary in utilizing this equipment. Forward rolls, backward rolls, group and individual stunts are used. I, II; 1.
143. AMERICAN SQUARE DANCE. I, II; 1.
144. ELEMENTARY FOLK DANCE. I, II; 1.
152. BACKETBALL AND SOFTBALL. Professional course. II; 1.
200. GAMES FOR SCHOOL AND PLAYGROUND. Prerequisite: For students majoring in physical education. I, II; 2.

Physics

101. GENERAL PHYSICS (MECHANICS, SOUND, AND HEAT). Lectures with demonstrations, recitations, and laboratory. For students in arts and sciences, and architecture. I, II; 5. Prerequisite: Mathematics 114 or 117.
102 GENERAL PHYSICS (LIGHT, ELECTRICITY, AND MAGNETISM). Lectures with demonstrations, recitations, and laboratory. For students in arts and sciences, and architecture. I, II; 5. Prerequisite: Physics 101.
103. GENERAL PHYSICS (MECHANICS, SOUND, AND HEAT). Lectures with demonstrations, recitations, and laboratory. For students in engineering, mathematics, physics, and chemistry. I, II; 5. Prerequisite: Mathematics 132 or 137, or concurrent registration in these courses.
104. GENERAL PHYSICS (ELECTRICITY, MAGNETISM, LIGHT, AND MODERN PHYSICS). Lectures with demonstrations, recitations, and laboratory. For students in engineering, mathematics, physics, and chemistry. I, II; 5. Prerequisite: Physics 103.
105. NURSES' PHYSICS. Primarily for students in nursing education. Those basic principles of physics that are pertinent to the training and routine of nurses in both institutional and private service. A lecture and problem course with emphasis on selected recent developments in nuclear physics and radioactive tracers. Lecture-demonstrations once each week; quiz three hours each week. I, II; 4. Prerequisite: Sophomore standing or consent of instructor.

Political Science

103. INTRODUCTION TO POLITICAL SCIENCE. A course designed to acquaint the students with basic concepts of political science. Topics to be covered will include the following: scope and method of political science; constitutions and forms of government; nature and problems of democracy; the making, control, and execution of public policy. I; 3.

104. INTRODUCTION TO INTERNATIONAL POLITICS. This is designed as a survey course. Topics to be covered will include the following: the development of the world system of states; the international political and economic struggle for power; the determination and conduct of foreign policy; problems involved in maintaining peace, and organizations devoted to its maintenance. II; 3.

150. AMERICAN GOVERNMENT: ORGANIZATION AND POWERS. Historical development and organization of national, state, and local governments; the federal system; national and state constitutions; civil and political rights; party system; nature, structure, powers, and procedure of legislative, executive, and judicial departments in state and nation. I, II; 3. Prerequisite: Sophomore standing.

151. AMERICAN GOVERNMENT: FUNCTIONS. Functions of national, state, and local governments; foreign relations and national defense; taxation and finance; law enforcement; police power; regulation of commerce, communications, and business; promotion of social and economic welfare; current problems. I, II; 3. Students may not receive credit for both Political Science 151 and 101 and 102. Prerequisite: Sophomore standing; Political Science 150, or consent of the department.

Psychology

100. INTRODUCTION TO PSYCHOLOGY. Introductory analysis and description of human behavior with special reference to observation, learning, memory, thinking, emotional life, and personality development. Major emphasis is placed upon psychological principles as they relate to daily life and everyday problems. I, II; 4. Prerequisite: Sophomore standing.

125. AN INTRODUCTION TO THE FIELDS OF PSYCHOLOGY. An introduction to the basic fields of psychology including the history of psychology, developmental psychology with an emphasis on the socialization of the child, individual differences, industrial, social, abnormal, and physiological psychology. I; 4. Students taking this course may not take Psychology 220 at the Urbana campus for credit. Prerequisite: Psychology 100, or its equivalent, or junior standing.

145. INDUSTRIAL PSYCHOLOGY. A consideration of socio-psychological principles of behavior in business and industry and of the scientific methods of investigation in this area, and a survey of specific methods of personnel technology. I, II; 3. Prerequisite: Psychology 100.

150. PERSONALITY AND SOCIAL BEHAVIOR. An introduction to the study of personality in relationship to the social environment. Application of psychological principles to social problems. I, II; 3. Prerequisite: Psychology 100, or equivalent.

Rhetoric

100. FRESHMAN REMEDIAL RHETORIC AND COMPOSITION. Open to students who fail the placement test for admission to Rhetoric 101. Intensive review of fundamentals, with considerable practice in composition. Students passing this course will be admitted to Rhetoric 101 without further examination. I, II; no credit.

101. FRESHMAN RHETORIC AND COMPOSITION. This course provides elementary training and practice in the comprehension and expression of written and oral English. I, II; 3. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: A passing grade on the placement examination or a passing grade in Rhetoric 100.

102. FRESHMAN RHETORIC AND COMPOSITION. This course provides elementary training and practice in the comprehension and expression of written and oral English. I, II; 3. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: Rhetoric 101.
133. EXPOSITORY WRITING. I, II; 3. Prerequisite: Rhetoric 101 and 102; sophomore standing.
144. NARRATIVE WRITING. Elements and practice of narrative writing. Not a course in short-story writing. I, II; 3. Prerequisite: Rhetoric 101 and 102; sophomore standing.
151. BUSINESS LETTER WRITING. I, II; 3. Prerequisite: Rhetoric 101 and 102. This course is not counted toward a major in English.

Social Sciences

111. THE INDIVIDUAL IN SOCIETY. A general education course designed to equip the beginning student with an understanding of the nature and the role of the individual as a member of the several groupings of his social community. I, II; 4. Credit is not given for this course to a student with credit, or concurrent registration, in a course in anthropology, psychology, or sociology. Students with 95 or more credit hours receive only 3 hours credit.
112. BASES OF AMERICAN LIFE. A general education course designed to acquaint the student with the physical, economic, political, and social developments of the United States and to equip him for intelligent active participation in local and national life. I, II; 4. Credit is not given for this course to a student with credit, or concurrent registrations, in Political Science 150 or 151 or History 151 or 152. Students with 95 or more credit hours receive only 3 hours credit.
113. WORLD PATTERNS AND WORLD PROBLEMS. A general education course designed to bring the student to an understanding of the geographic, economic, and political bases of the present world situation. I, II; 4. Credit is not given for this course to a student with credit, or concurrent registration, in Geography 103. Students with 95 or more credit hours receive only 3 hours credit.
114. THE UNITY OF KNOWLEDGE. A general education course designed to acquaint the student with the development of philosophical and scientific disciplines in intellectual history, and to equip him to direct his further general education by his awareness of the integrative factors in current education and culture. I, II; 4. Prerequisite: Sophomore standing and a 3.5 average.
116. FAMILY LIVING. The development of the family from early to modern times. The factors involved in the establishment and maintenance of a family. Opportunities for individual counseling. I, II; 4. Prerequisite: Sophomore standing or consent of instructor.

Sociology and Anthropology

Sociology

100. PRINCIPLES OF SOCIOLOGY. Concerned with the scientific study of human societies. I, II; 3. Prerequisite: Sophomore standing.
130. SOCIETY AND INDIVIDUAL DEVELOPMENT. Nature of person and relation to institutions, social order, and development. I, II; 3. Prerequisite: Sociology 100.
140. SOCIAL CONTROL. Sociological principles, institutional and other means and techniques of social control. I, II; 2. Prerequisite: Sociology 100.

Anthropology

107. INTRODUCTION TO ANTHROPOLOGY. An introduction to general anthropology covering human origins and early man; race and racism, archaeology and the beginnings of human civilization, linguistics, and the nature of culture with examples from primitive societies. I, II; 3. Prerequisite: Sophomore standing.

Spanish

101. ELEMENTARY SPANISH, For students who have no credit in Spanish. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. No credit toward graduation is given for Spanish 101 without 102.
102. ELEMENTARY SPANISH. Continuation of Spanish 101. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Spanish 101, or one year of high school Spanish.
103. INTERMEDIATE SPANISH. Rapid reading, review of grammar, composition, conversation. I, II; 4. Prerequisite: Spanish 102, or two years of high school Spanish.
104. INTERMEDIATE SPANISH. Continuation of Spanish 103. I, II; 4. Prerequisite: Spanish 103, or three years of high school Spanish.
113. ELEMENTARY COMPOSITION AND CONVERSATION. Conducted largely in Spanish. May be taken concurrently with Spanish 103. Does not count toward the major in Spanish. I, II; 2. Prerequisite: Spanish 102, or two years of high school Spanish.
201. INTRODUCTION TO SPANISH LITERATURE. Reading of modern authors of Spain and Spanish America. I; 3. Prerequisite: Spanish 104, or four years of high school Spanish.
202. INTRODUCTION TO SPANISH LITERATURE. Reading of modern authors of Spain and Spanish America. II; 3. Prerequisite: Spanish 201 or consent of instructor.

Speech

101. PRINCIPLES OF EFFECTIVE SPEAKING. Preparation and presentation of short informative and persuasive speeches, with emphasis on the selection and organization of material, methods of securing interest and attention, and the elements of delivery. I, II; 3. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: A passing grade in Rhetoric 101 placement examination or a passing grade in Rhetoric 100.
105. VOICE AND ARTICULATION. A drill course for the improvement of the normal speaking voice. II, 2. Students with 95 or more credit hours receive only 1 hour credit.
107. PARLIAMENTARY PROCEDURE. Principles and practice of parliamentary procedure. I, II; 2. Students with 95 or more credit hours receive only 1 hour credit.
111. BUSINESS AND PROFESSIONAL SPEAKING. Study, preparation, and presentation of the chief types of business speeches, with special attention to conferences, sales talks, interviews, job applications. I, II; 2. Prerequisite: Speech 101; sophomore standing.
117. ARGUMENTATION. Methods of logical analysis; the kinds and forms of argument; the adaptation of argumentative materials to audience situations; and the forms of debate. Practice debates on current subjects. I, II; 3. Prerequisite: Speech 101; sophomore standing.
141. ORAL INTERPRETATION OF LITERATURE. Principles of interpretations, analysis, and oral reading of prose literature and verse. I, II; 2. Students with 95 or more credit hours receive only 1 hour credit.

161. FUNDAMENTALS OF ACTING. A study of the methods of acting, with emphasis given to basic stage techinques. The role of the character in relation to the play as a whole; the intellectual and emotional values of the play and their interpretation by means of voice and acting. I, II; 3. Prerequisite: Speech 141.

Theoretical and Applied Mechanics

150. ANALYTICAL MECHANICS (STATICS). Resultants of force systems, algebraic and graphical condition of equilibrium of force systems. Analysis of forces acting on members of trusses, frames, etc. Forces due to friction. Centroids. I, II; 2. Prerequisite: Registration in Mathematics 142.

154. ANALYTICAL MECHANICS (STATICS AND DYNAMICS). A combination of Theoretical and Applied Mechanics 150 and 211 with less emphasis on some topics. For electrical engineering students only. I, II; 4. Prerequisite: Registration in Mathematics 142.

156. ANALYTICAL MECHANICS (STATICS AND DYNAMICS). A combination of Theoretical and Applied Mechanics 150 and 211. I, II; 5. Prerequisite: Registration in Mathematics 142.

171. ELEMENTS OF MECHANICS (STATICS). Resultants and equilibrium of force systems; conditions of equilibrium applied to trusses, frames, etc.; forces due to friction; centroids; stress and deformation in direct tension and compression; riveted and welded joints; properties of materials. For architects only. I, II; 3. Prerequisite: Mathematics 122.

172. STRENGTH OF MATERIALS. Relationships between external forces acting on beams and the stresses produced; shear, moment, slope, and deflection diagrams; moment of inertia; columns. For architects only. I, II; 3. Prerequisite: Theoretical and Applied Mechanics 171.

211. ANALYTICAL MECHANICS (DYNAMICS). Displacement, velocity and acceleration of a particle; relation between forces acting on rigid bodies and the changes in motion produced; translation; rotation; plane motion; solutions using the principles of force, mass, and acceleration, work and energy, and impulse and momentum. I, II; 3. Prerequisite: Theoretical and Applied Mechanics 150.

CALENDAR

Chicago Undergraduate Division

1952—FIRST SEMESTER

Sept. 3, Wed.—Sept. 10, Wed. . . . . Orientation Period
Sept. 11, Thurs.—Sept. 13, Sat. . . . . Registration
Sept. 15, Mon. . . . . Instruction Begins
Nov. 25, Tues., 6 p.m. . . . . Thanksgiving Vacation Begins
Dec. 1, Mon., 8 a.m. . . . . Thanksgiving Vacation Ends
Dec. 3, Wed. . . . . Illinois Day (State admitted to the Union, 1818)
Dec. 22, Mon., 8 a.m. . . . . Christmas Vacation Begins
Jan. 5, Mon., 8 a.m. . . . . Christmas Vacation Ends
Jan. 16, Fri.—Jan. 24, Sat. . . . . Semester Examinations

1953—SECOND SEMESTER

Feb. 2, Mon.—Feb. 4, Wed. . . . . Orientation Period
Feb. 5, Thurs.—Feb. 7, Sat. . . . . Registration
Feb. 9, Mon. . . . . Instruction Begins
Mar. 2, Mon. . . . . University Day (University opened, 1868)
Apr. 2, Thurs., 6 p.m. . . . . Easter Vacation Begins
Apr. 9, Thurs., 8 a.m. . . . . Easter Vacation Ends
May 8, Fri. . . . . Honors Day
May 30, Sat. . . . . Memorial Day
June 1, Mon.—June 9, Tues. . . . . Semester Examinations

1953—SUMMER SESSION

June 19, Fri.—June 20, Sat. . . . . Registration
June 22, Mon. . . . . Instruction Begins
July 4, Sat. . . . . Independence Day
Apr. 14, Fri.—Aug. 15, Sat. . . . . Summer Session Examinations

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Strable, Mrs. Jane S., B.S. in L.S., Instructor in Library Science and Circulatio Librarian.
Sullivan, Bernadette, A.B. in L.S., Assistant Catalog Librarian with the rank of In structor.
Sutter, Nancy A., A.M., Instructor in Psychology and Assistant Counselor in th Student Counseling Bureau.
Teichmann, Mrs. Elizabeth, A.M., Instructor in Foreign Languages.
Thom, Kathleen J., M.S., Instructor in Biological Sciences.
Tighe, John P., M.S., Instructor in Physical Education for Men, *on military leave absence.*
Timmis, Mrs. Beatrice S., A.M., Instructor in English.
Tort, Mrs. Ferdina C., A.M., Instructor in Foreign Languages.
Van Dam, Thomas E., M.S., Instructor in Physical Sciences.
Versen, Walter G., B.S., Instructor in Physical Education for Men and Assista Football Coach.
Waller, Frederick O., A.M., Instructor in English.
Whalley, Elsa A., M.S., Instructor in Social Sciences.
Willett, Maurita F., A.M., Instructor in English.
Williams, Henry F., A.M., Instructor in Economics.
Williams, Mrs. Rena M., B.S., Instructor in English.
Wright, Mrs. Elizabeth V., A.M., Instructor in English.
Yankow, Henry G., Jr., A.M., Instructor in Accountancy.
Zanotti, George J., B.S., Instructor in General Engineering Drawing.
Zeimer, Jeannette M., M.S., Instructor in Physical Sciences.

Assistants

Banks, John A., B.S., Assistant in Architecture.
Creaser, James W., A.M., Psychometrist in the Student Counseling Bureau.
Kristufek, Charles J., M.S., Assistant in Physical Education for Men and Tenn Coach.
Mann, William C., M.S., Assistant in Physical Education for Men and Trainer.
Mart, Dorothy J., B.S., Assistant in Physical Education for Women.
McCarron, Mary M., A.B. in L.S., Serials Librarian with the rank of Assistant.
Meunier, Juanita, B.S., Assistant in Physical Education for Women.
Rader, Richard R., B.S., Assistant in Physical Education for Men.
Richardson, Nancy, B.S., Assistant in Physical Education for Women.
Ross, Dick C., B.S., Assistant in Economics.
Vande Bunt, Carol, A.B., Assistant in Psychology and Personnel Technician in th Student Counseling Bureau.

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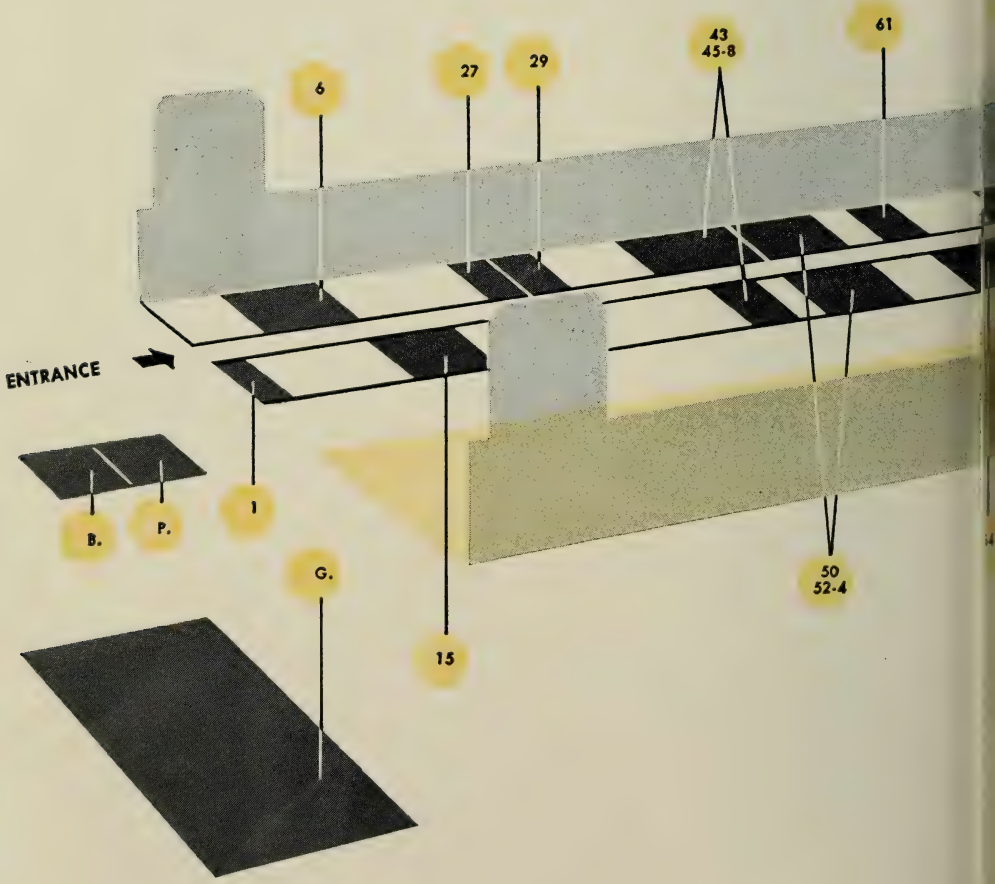
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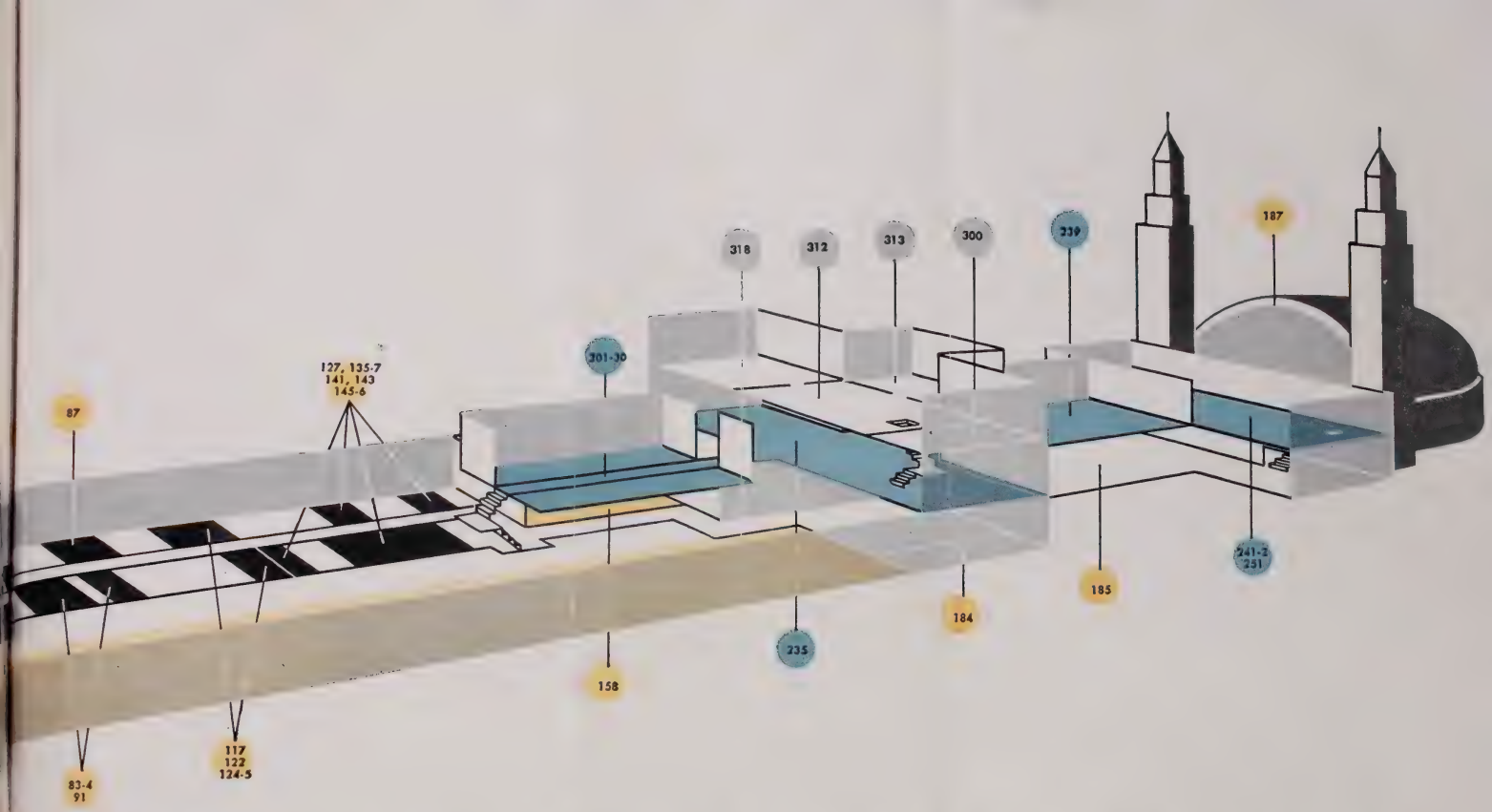

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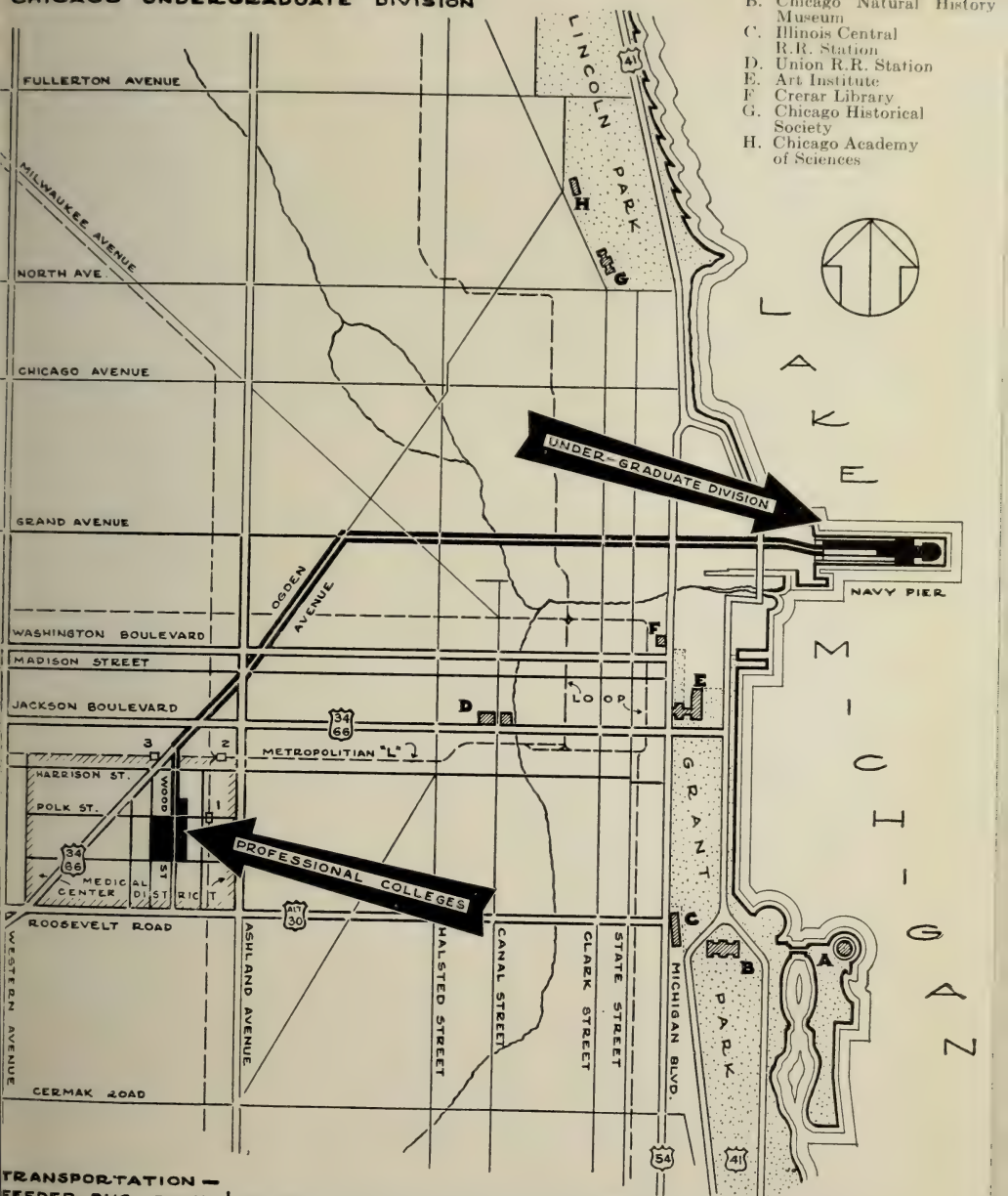
UNIVERSITY OF ILLINOIS

CHICAGO PROFESSIONAL COLLEGES
CHICAGO UNDERGRADUATE DIVISION



TRANSPORTATION —
FEEDER BUS — POLK & WOOD STREETS, TRANSFER GRAND AVE. STREET CAR.
STREET CAR — ASHLAND CAR ON PAULINA ST., TRANSFER GRAND AVENUE.
"L" STATIONS: 1-POLK ST. 2-MARSHFIELD 3-OGDEN AVE., ALL TRAINS TO LOOP,
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Chicago Undergraduate Division

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Charles C. Caveny
Dean

YOUR UNIVERSITY

The Chicago Undergraduate Division of the University is entering its eighth school year. Since October, 1946, this two-year branch of the University of Illinois has offered a well-rounded educational program to thousands of students who found it to their advantage to live in the Chicago metropolitan area while attending college.

Complete pre-professional freshman and sophomore courses of study are offered in the College of Liberal Arts and Sciences with a three year curriculum for pre-medical students. Professional two-year curricula are available in the College of Commerce and Business Administration, and the College of Engineering. In addition, architecture and architectural engineering curricula, as a part of the College of Fine and Applied Arts, are offered under the administration of the College of Engineering.

Professional curricula in physical education, teacher training, and a program leading to a Bachelor of Science degree in nursing are also available. The basic course and the first year of the advanced course in ROTC have been established for men students.

Students enrolled at the Chicago Undergraduate Division have the same status as students matriculating on the Urbana campus. Courses of instruction, the schedule of fees, and admission requirements are the same on both campuses. Students completing the curricula at the Chicago

Undergraduate Division are given priority in completing their work for degrees on the Urbana campus.

Excellent instructional facilities are provided in the school's 68 classrooms and 33 modern, fully-equipped laboratories. A 70,000-volume library, food service, well-furnished lounges, and recreational facilities supplement the academic program. A large gymnasium adjacent to the Pier houses the athletic program.

As an important part of the services of the Student Counseling Bureau, educational and vocational guidance examinations are offered to prospective students. Counseling services of the Bureau, as well as the facilities of the offices of the Dean of Students and his assistants, the Dean of Men and Dean of Women, are available to students at all times.

The Chicago Undergraduate Division, through its educational, social, and cultural program, strives to provide its student body with the same high degree of service which has been so long a part of University of Illinois tradition.

ADMISSION

There are Seven Steps

In order to become a student at the Chicago Undergraduate Division of the University of Illinois, an applicant must take the following steps:

1. *Obtain an application for admission.* The Office of Admissions and Records of the Chicago Undergraduate Division will be glad to provide application blanks for admission in response to requests received by mail, by telephone, or in person.

2. *Provide the Office of Admissions and Records with an official transcript of his record in high school and his record at each college or institution of higher education which he has attended since leaving high school.* The student assumes the responsibility for having these records forwarded directly to the Office of Admissions and Records, University of Illinois, Chicago Undergraduate Division, Navy Pier, Chicago 11, by an official of the school concerned.

The applicant must make his own arrangements to have his transcripts forwarded to this office as soon as possible to permit an early evaluation of his credentials.

In addition, applicants who have been on active duty in the Armed Forces must also submit photostatic copies of their service separation papers.

3. *Decide which college and curriculum in the University he desires to enter.* To assist applicants in making this decision, this division of the University offers Vocational and Educational Guidance Examinations which are followed by professional counseling. For new freshmen, these guidance examinations are a required activity of the orientation period.

However, since the time available for counseling during the orientation period is extremely limited, these examinations are now being offered several months in advance. Appointment requests for these examinations may be made through the Office of Admissions and Records. If the applicant has any question whatsoever as to the course of study he desires to pursue in college, the University strongly urges him to take these tests and receive counseling well in advance of the orientation period.

4. *Complete and return the application blank.*

5. When an applicant's case is complete, that is, after his completed application blank and all necessary supporting records and transcripts have been received, the case will be evaluated. If the application is approved, the applicant will be sent a permit to enter, an appointment for such placement, guidance, and motor fitness tests as may be necessary, an appointment for a physical examination, and information as to the date and place of his college meeting and of registration. If the application is not approved, the Office of Admissions and Records will send the applicant written notice of this action, explain his deficiencies, and make suggestions as to the manner in which he may remove them and qualify for admission.

6. *Report to Navy Pier for physical examination, college meeting, and tests listed in paragraph 5 above, on the dates specified in the notice which the applicant has received.*

7. *Register, pay tuition and fees, and start classes.*

Harold E. Temmer,
Examiner and Recorder

ADMISSION REQUIREMENTS

For Admission Without Entrance Examinations (by certificate)

I. HIGH SCHOOL GRADUATES

The admission requirements to the University of Illinois are twofold. (1) General University Admission Requirements, which apply to every student entering the University of Illinois, and (2) specific subjects required for admission to a particular college and/or curriculum within the University, which apply to every student entering that college and/or curriculum.

Since each student entering the University of Illinois must enroll in a particular college and/or curriculum within the University, each student must meet both sets of admission requirements, i.e., the General University Admission Requirements and the specific subject requirements for the college and/or curriculum of his choice.

A. **General University admission requirements:**

1. Graduation from an accredited high school.

2. Age.—An applicant must be at least sixteen years of age. The dean of the college concerned, however, may admit, on petition, a student fifteen years of age who meets all other requirements for admission and who is to reside while attending the University with his parents or guardian or with someone selected by them.

3. Fifteen units of acceptable secondary school work distributed as follows:

   a. A minimum of nine units of work in the academic fields (English, mathematics, sciences, foreign languages, history, and social studies) including:

      (1) At least three units of English.

      (2) At least two majors (including English and one minor selected from the list of acceptable majors and minors below. *Exception:* The requirement of a second major is waived for applicants who rank in the upper half of their class scholastically on graduation.

   b. Six units from any of the high school subjects which are accepted by an accredited school toward its diploma and which meet University of Illinois accrediting standards.

B. **Acceptable Majors and Minors**

1. Definitions

   a. *Unit.*—A *unit* is the equivalent of two high school credits; i.e., it is the value given to a course of study covering two semesters and including not less than the equivalent of 120 sixty minute periods of class room work. Two hours of work requiring little or no preparation outside the class are considered as equivalent to one hour of prepared classroom work. Fractional credits of the value of less than one-half unit will not be accepted. Not less than one unit of work will be accepted in a foreign language, elementary algebra, plane geometry, physics, chemistry, or biology.

b. *Major.*—A *major* consists of a three year sequence in one academic field.

c. *Minor.*—A *minor* consists of a two year sequence in one academic field.

(1) Please note that the University's definition of a *major* and a *minor* is probably not the same as that in use in your high school.

2. The required majors and minor as defined may be selected only from the following five academic fields.

a. English—In all cases one major must be in English. Only courses in history and appreciation of literature, and in composition (including oral composition when given as a a part of a basic English course) and grammar, will count toward this major. Four units in English, while not required for any curriculum, are recommended by all the colleges.

b. Foreign Language—Three units in one language constitute a major. Two units in one language constitute a minor. The acceptable foreign languages are: German, French, Spanish, Italian, Latin, and Greek. Less than one unit in a language is not acceptable for admission.

c. Mathematics—Only courses in algebra, plane geometry, solid and spherical geometry, and trigonometry will be accepted toward a major or a minor in this subject. (General mathematics may be accepted in lieu of algebra and geometry in cases in which the content of the course is essentially the same as that ordinarily included in algebra and geometry. However, essentials of mathematics, business or shop mathematics, and commercial arithmetic are not acceptable toward a major or minor in mathematics.) In Engineering and in the chemistry and chemical engineering curricula of Liberal Arts and Sciences, where advanced algebra or solid geometry, or both, are required, students who have only one unit in algebra and one unit in geometry, and who meet all other entrance requirements, may be admitted on condition that the deficiency be removed during their first year of residence.

d. Science—Including physics; chemistry; biology, or botany and zoology; general science, or physiology and physiography; astronomy; and geology. The three units required for a major must include at least a total of two units chosen from one or more of the following subjects: physics, chemistry, botany, and zoology. Biology may be offered in place of botany or zoology. The two units required for a minor must include at least one unit from the above subjects.

e. Social Studies—This field is divided into two areas

(1) History, e.g., United States, modern, ancient, and medieval, etc. Three units required for a major must include at least two units in history. The two units required for a minor must include at least one unit of history.

(2) General Social Studies—civics, economics, commercial or economic geography, and sociology.

C. **College Subject Requirements.**—Applicants must present credit in the subjects required for admission to the college and curriculum of their choice (See Chart page 9).

Checking records with the Office of Admissions and Records

Required Subjects for Specific Colleges and Curricula

Colleges	*Subjects required for admission*
COLLEGE OF COMMERCE	
All Fields (Accountancy, Banking and Finance, Commerce and Law, Commercial Teaching, Economics, Industrial Administration, Management, Marketing, Public Affairs, Secretarial Training).	English, 3 units. Algebra, 1 unit. Geometry, 1 unit.
COLLEGE OF ENGINEERING	
All Curricula (Aeronautical, Agricultural, Ceramic, Civil, Electrical, General, Industrial, Mechanical, Metallurgical, Mining, Engineering Physics).	English, 3 units. Algebra, 2 units. Plane Geometry, 1 unit. Solid Geometry, ½ unit. Trigonometry, ½ unit. (See paragraph 2c, page 7.)
Curricula in Architecture: Design Option (for B.S. degree in Architecture); Construction Option (for B.S. degree in Architectural Engineering).	English, 3 units. Algebra, 1½ units. Geometry, 1 unit. (See paragraph 2c, page 7.)
COLLEGE OF LIBERAL ARTS AND SCIENCES	
General Curriculum with majors in Bacteriology, Botany, Economics, English, French, Geography, Geology, German, History, Philosophy, Political Science, Psychology, Sociology, Spanish, Speech, Zoology. General Curriculum preparatory to Education, Journalism, Law. Teacher-training Curricula (Not requiring Chemistry, Physics, or Mathematics).	English, 3 units. Language, 2 units.[1] (See paragraph 2b, page 7.)
General Curriculum with majors in Chemistry, Physics, Mathematics, Physiology. Special Curricula preparatory to Dentistry, Medicine, Veterinary Medicine, Pre-Nursing. Teacher-training Curricula (Requiring Chemistry, Physics, and Mathematics).	English, 3 units. Language, 2 units[1] (See paragraph 2b, page 7.) Algebra, 1 unit. Geometry, 1 unit.
Special Curricula in Chemistry.	English, 3 units. Language, 2 units.[1] (See paragraph 2b, page 7.) Algebra, 1½ units. Geometry, 1 unit. (See paragraph 2c, page 7.)
Special Curricula in Chemical Engineering.	English, 3 units. Language, 2 units.[1] (See paragraph 2b, page 7.) Algebra, 2 units. Plane Geometry, 1 unit. Trigonometry, ½ unit.
Elementary Education Curriculum.	English, 3 units.
Continuation Program in Nursing.	English, 3 units. Language, 2 units.[1] (See paragraph 2b, page 7.) Certification by Director, University of Illinois, School of Nursing.
PHYSICAL EDUCATION	
Curriculum for Men and Curriculum for Women.	English, 3 units. Written approval of the Director of Physical Education.

[1]Foreign language requirement is waived for students who rank in the upper half of their high school graduating class.

Admission to the College of Engineering Beginning September, 1953

For students entering the College of Engineering in September, 1953, and thereafter, the mathematics requirement for admission to full freshman standing will be as follows: algebra, 2 units; plane geometry, 1 unit; solid geometry, ½ unit; trigonometry, ½ unit. The University requires a mathematics placement examination of students presenting these credits and will adjust such students' curricula in accordance with the results of the placement examination.

Students who present only one unit in algebra and one unit in geometry, and who meet all other requirements, may be admitted on the condition that the deficiencies be removed during their first year of residence, and with the understanding they can not complete the requirements for a degree in the College of Engineering in eight semesters.

Students who do not present the four units in mathematics as specified may be admitted to full standing by passing a proficiency examination at the University which will indicate their preparation is adequate for entrance into analytical geometry.

II. TRANSFER STUDENTS

A. All requirements listed in Item I, page 5. *Exceptions:* An applicant who is transferring from an institution rated as Class "A" by the University and who is deficient in the admission requirements listed in Item I may be admitted if he presents at least 30 semester hours of credit in transfer with a 3.00 average ("C") and without any failures in any college subject. However, such applicants who desire to enter either the College of Commerce and Business Administration or the College of Engineering must present credit in the minimum mathematics required for these colleges.

B. Honorable dismissal from all institutions of higher learning previously attended, and a collegiate scholastic average of at least 3.00 ("C") in terms of the University of Illinois grading system. *Exception:* An applicant whose record at some other institution comes within either of the following classifications may enter the University only on approval of the dean of the college concerned and under the conditions imposed by him:

1. An applicant on probation at, or dropped from, another institution for poor scholarship or for disciplinary reasons. (In the latter instance, he must also obtain the approval of the University Senate Committee on Student Discipline.)

2. A person whose collegiate scholastic average is less than 3.00 in terms of the University of Illinois grading system.

III. NON-RESIDENT APPLICANTS

Applicants who are not residents of the State of Illinois may be admitted (if vacancies exist after all qualified resident applicants have been accommodated) provided they meet all requirements listed in Item I, page 5, and further provided that:

A. As high school graduates they ranked scholastically in the top three-quarters of their class on graduation.

B. As transfer students they present a collegiate scholastic average of at least 3.0 ("C") in terms of the University of Illinois grading system.

IV. SPECIAL SCHOLASTIC ADMISSION REQUIREMENTS

A. High school graduates who are residents of the State of Illinois and who rank in the fourth (lowest) quarter of their class scholastically on graduation, if otherwise qualified, will be admitted on scholastic probation.

B. Applicants for the following special curricula must meet the scholastic minima indicated opposite each curriculum.

Curriculum	Scholastic Requirements
1. Pre-Medical	
a. High school graduates	Rank in upper half of graduating class.
b. Transfer students	3.5 collegiate average through the third semester of collegiate work. 3.75 collegiate average commencing with the fourth semester of college work.
2. Pre-Dental, Pre-Veterinary Medicine	
a. High school graduates	Rank in upper half of graduating class.
b. Transfer students	Collegiate average of 3.5.

ADMISSION BY EXAMINATION

Applicants who do not meet the requirements for admission listed above may qualify for admission by passing one or more examinations as outlined below: (*Exception:* This section does not apply to applicants who are deficient in the scholastic admission requirements outlined in Items III and IV, page 11. Scholastic deficiencies may not be removed by examination—only by an improved scholastic record.)

University of Illinois Entrance Examinations

Applicants who may be classified in any of the following categories may qualify for admission by passing University of Illinois entrance examinations as indicated under each category:

A. Graduates of Unaccredited High Schools:

1. Applicants who rank in the top twenty-five per cent of their graduating class from an unaccredited secondary school which offers four years of instruction may qualify by passing an entrance examination in English composition and rhetoric and such other entrance examinations in high school subjects as may be necessary to complete admission requirements.

2. Applicants who are graduates of unaccredited secondary schools and rank below the top twenty-five per cent of their graduating class may qualify by passing entrance examinations for a minimum of fifteen units of secondary credit, including all courses necessary to meet University and curricular admission requirements.

B. Applicants who have attended an accredited high school, but who have not been graduated, may qualify by passing an entrance examination in English composition and rhetoric and additional entrance examinations for a total of at least four units of work in subjects to be designated by the University.

C. Applicants who have not completed any secondary school work may qualify by passing University of Illinois entrance examinations in all high school subjects necessary to meet general University and specific college admission requirements.

D. Applicants who do not meet University admission requirements with respect to any one or more of the following:

Total units of credit
Total academic units
Major and minors
Subjects required for admission to the college of the applicants' choice

} may qualify by passing University of Illinois entrance examinations in the subjects in which they are deficient

These entrance examinations will be given three times a year, usually in September, January, and June. Applications to take these examinations must be filed in advance in the Office of Admissions and Records.

General Educational Development Tests

United States Armed Forces Institute General Educational Development Tests.—Veterans of active duty with the United States Armed Forces or with the United States Maritime Service and adult non-veterans (non-veterans 21 years of age or older) may qualify for admission to the University by passing the USAFI General Educational Development Tests under the following conditions:

A. Applicants seeking admission to the College of Liberal Arts and Sciences may qualify if their G.E.D. test scores are sufficiently high to entitle them to a scholastic rank equivalent to that of a student who has been graduated in the upper half of his class in an accredited secondary school. Applicants, whose G.E.D. scores are passing but below minimum required for upper-half classification scholastically, may qualify if they present credit from accredited sources in two successive years of an acceptable foreign language. *Exception:* Applicants desiring to enter specialized curricula in Liberal Arts and Sciences for which mathematics is required (see page 9) may not qualify by G.E.D. tests alone, but must present credit from accredited sources in elementary algebra and plane geometry.

B. Applicants seeking admission to the College of Commerce and Business Administration or the College of Engineering may qualify by passing the G.E.D. tests and presenting credit from accredited sources in the required mathematics.

C. Applicants seeking admission to the Physical Education curricula may qualify by passing the G.E.D. tests and securing the approval of the Director of Physical Education.

TUITION AND FEES

TUITION—Illinois residents (except those holding scholarships) registering in nine semester hours or more pay tuition of.....$50.00
Non-residents registering in nine semester hours or more pay tuition of 160.00
Students taking eight semester hours or less pay $4 per semester hour if residents of Illinois, or $11 per semester hour if non-residents.

HOSPITAL AND MEDICAL SERVICE FEE—All students registering in six semester hours or more pay as insurance for hospital and medical service a fee of..... 5.00

LABORATORY, LIBRARY, AND SUPPLY FEE—All students registering in nine semester hours or more pay a laboratory, library, and supply fee of 11.00
Students taking less than this amount of instruction pay $5.50 each semester.

STUDENT ACTIVITIES FEE—All students registering in six semester hours or more pay a student activities fee of..... 6.00

Stop for supplies at the Bookstore

DEPOSITS—Each student must make a deposit of $5 at the time of his first registration. An additional deposit of $10 ($15 in all) is required of students withdrawing military equipment. Chargeable against these deposits are such items as unreturned towels and locks, lost library books, library fines, shortages in laboratory, military, and other equipment, etc. Whenever the amount of the $5 deposit falls below $2.50 or the amount of the $15 deposit falls below $12.50, the student will be required immediately by additional deposit to bring the total up to $5 and $15, respectively. Any balance in deposit will be returned to the student in case he officially withdraws from the University. This refund of deposit will be made after the close of registration for the next regular semester following the student's withdrawal. The $10 military deposit will be returned to the student, upon receipt of the military equipment, at the end of each school year.

IDENTIFICATION CARD—Each student, on payment of tuition and fees each semester, is given an identification card for use in obtaining loans of library books, locks, towels, and other equipment.

Tuition and Fees for the Summer Session

TUITION—Illinois residents (except those holding scholarships) registering in five semester hours or more pay tuition of.....$25.00
Non-residents registering in five semester hours or more pay tuition of 80.00
Students taking four semester hours or less pay $4 per semester hour if residents of Illinois, or $11.00 per semester hour if non-residents.

HOSPITAL AND MEDICAL SERVICE FEES—All students registering in four semester hours or more pay as insurance for hospital and medical service a fee of..... 2.50

LABORATORY, LIBRARY, AND SUPPLY FEE—All students registering in five semester hours or more pay a laboratory, library, and supply fee of 5.50
Students taking less than this amount of instruction pay $2.25 for the summer session.

STUDENT ACTIVITIES FEE—All students registering in four semester hours or more pay a student activities fee of..... 3.00
All fees listed above are due and payable in full when the student registers.

Refunds of Tuition and Fees

In case a student withdraws from the University[1] during the first ten days of instruction, the total amount of his tuition and fees will be refunded. After ten days and before the middle of the semester, a rebate of one-half the tuition and fees will be made. After the middle of the semester, no rebate will be allowed. In the summer term, the total amount of the tuition and fees paid will be refunded if withdrawal occurs within the first five days; one-half the amount after the first five days but within the first four weeks; and nothing after the beginning of the fifth week. If a student withdraws from one or more courses thereby reducing his study load to eight or less semester hours in the regular semester or four or less hours in the summer session, a pro rata refund of tuition and fees will be made according to the rebate schedule, provided that such a reduction of study load occurs during the full rebate period.

Miscellaneous Fees

SERVICE CHARGE FOR DEFERRED FEES—A service charge of ten percent of the amount of fees deferred, but not to exceed $3 a semester, is assessed for the privilege of deferring fees, and this charge must be paid on the day of registration. If deferred fees are paid within ten days after registration, the service charge is refunded *except* that a minimum service charge of $1 is retained by the University in all cases. The general deposit of $5 (if this deposit has not previously been paid), the service charge, and all charges from previous semesters must be paid on the day of registration. Arrangements for deferred fees are made directly with the cashier.

CHANGE FEE—For every change of program approved later than noon of the second Monday following registration the fee is.....$1.00

TRANSCRIPT FEE—Each student who has paid all his University fees is entitled to receive, without charge, one transcript of his record. For each additional transcript the fee is..... .50

LATE REGISTRATION FEE—Former students who register after the regular registration days in either semester pay a late registration fee of 5.00

[1]Students leaving the University before the end of a semester or session should initiate withdrawal papers at the office of the dean of their college. Failure to do so will result in the student being dropped for poor scholarship at the end of the semester.

SPECIAL EXAMINATION FEE—For any special examination to remove a failure the fee is..... 5.00

FEE TO AUDIT COURSES—Persons not connected with the University who attend classes as listeners pay for each course..... 7.50

VETERANS' REGISTRATION INFORMATION

Veterans may qualify for admission to the Chicago Undergraduate Division under the regular entrance procedures listed on pages 0 to 0. The Chicago Undergraduate Division has been approved to offer training under the following veterans' educational benefits acts: Public Law 346, the World War II G. I. Bill; Public Law 550, the "Korean G. I. Bill;" and Public Laws 16 and 894, the Vocational Rehabilitation Acts. Questions concerning benefits under these laws may be referred to the Veterans Section, Office of Admissions and Records.

Authorization

To enroll under one of the above benefits at the Chicago Undergratuate Division, an applicant, in addition to applying for admission to this Division, must take the following steps:

1. Determine the course in which he will register and the highest degree toward which he plans to work. If there is any doubt as to the final vocational objective or the course to follow to reach it, some type of educational and vocational counseling should be received before completing application to the Veterans Administration.

2. Make application to the Veterans Administration, 2030 West Taylor Street, Chicago, for the proper training authorization. A copy of service separation papers must accompany this application. Applications should be filed as early as possible, and not later than the first day of classes.

   a. Applications for Public Laws 346, 16, and 894, must show the exact college and curriculum in which the veteran will register.

   b. Applications for Public Law 550 need show as the goal only the highest degree desired, e.g., Bachelor's Degree, Master's Degree. Titles such as Bachelor of Science, Master of Arts, etc., should not be specified unless the applicant is certain that is the degree awarded in his course.

3. The training Certificate received from the Veterans Administration should be brought to the University on the day of registration for classes. It will not be accepted before that time. Certificates received after the beginning of classes should be turned in at once to the Veterans Section, Office of Admissions and Records, Room 15.

Transfers Under the G. I. Bill

Veterans transferring from another school under the G. I. Bill must obtain a notice of interruption from that school (P.L. 346 Form 7-1905e or P.L. 550 Form 7-1995) and submit it to the Veterans Administration in request of a supplemental training certificate for this University.

1. Applications for transfer under P.L. 346 must reach the Veterans Administration before the veteran interrupts his course at his previous school.

2. Veterans transferring between Divisions of the University of Illinois must follow the above procedure for changing schools if they are authorized under P.L. 550. Veterans under P.L. 346 may use the same Certificate if transferring between the Chicago Undergraduate Division and the Urbana campus, provided they do not change their college or curriculum and will register the next succeeding semester.

CHOICE OF COURSE

Veterans applying for any educational benefits should be extremely cautious in choosing their courses. Once a particular program is authorized by the Veterans Administration, the veteran may not alter that program without jeopardizing his benefits, particularly if he fails to do satisfactory work in the original course. If assistance in choosing the correct course is desired, the facilities of the University Student Counseling Bureau are available at all times (see page 20). The Veterans Administration also will provide free counseling for any veteran.

SPECIAL PROVISIONS

Charges for Tuition and Fees

1. Public Law 550 requires each veteran to pay the costs of his education out of his monthly allowance. The fees listed on page 15 are payable at the time of registration for classes. The Veterans Administra-

tion will mail the first allotment check about six weeks after a veteran enters training.

2. Veterans under Public Law 346 who present a valid Certificate of Eligibility, V.A. Form 7-1953, at the time of registration will be required to pay only the $5.00 general deposit fee. Veterans not having the Certificate at that time will be required to pay all fees, but will receive a refund when the authorization is presented to the University. This provision also applies to veterans enrolling under Public Law 16 or 894.

Attendance

The University of Illinois is required by the Veterans Administration to submit a monthly attendance report for each veteran enrolled under P.L. 550.

PUBLIC LAWS 16 AND 894

Students receiving educational benefits under either of the federal Vocational Rehabilitation Acts should be certain that there is an authorization on file for them at the University by the time they are to register for classes. Early application for training should be filed with the Veterans Administration Training Officer.

MILITARY SCHOLARSHIPS

Veterans may be eligible for the State Military Scholarship, whether or not they receive federal benefits. Any person who served in the armed forces during World War I or any time between September 16, 1940, and the official termination of the present national emergency and received an honorable discharge may qualify for this four-year tuition scholarship if he was a resident of Illinois or a student in the University of Illinois at the time of entering service. No examination or minimum grade average is required. Information and application blanks are available from the Office of Admissions and Records, room 15, window E.

SELECTIVE SERVICE DEFERMENT

The Office of Admissions and Records will supply required certifications for students who wish to apply for educational deferments under the regulations of the Selective Service System. Application should be made

at Room 15 at the time the student completes his classification questionnaire. Information concerning educational deferments also is available from this office.

STUDENT WELFARE

The University's interest in the individual student extends beyond the class room to include each student's personal adjustment to college life. To this end, the University provides a broad program of educational, vocational, and personal counseling, instruction in healthful living, and extracurricular activities, both social and cultural.

Aid in adjustment to college life begins before the student enrolls at the Chicago Undergraduate Division, with the services of the Student Counseling Bureau available to prospective students seeking help in planning their college careers. New students have an opportunity to meet the deans and directors at a special meeting at the start of each semester.

STUDENT COUNSELING BUREAU

The purpose of the Student Counseling Bureau is to help prospective, present and former students in forming college and vocational plans, and in making the fullest use of resources of the University for meeting their individual needs.

High school seniors, in the second semester of their senior program, as well as high school graduates and entering freshmen are urged to take advantage of aptitude testing and of individual counseling *before* entering the University. These services are available if requested through high school counselors and the Office of Admissions and Records.

The Bureau's facilities are available at all times to students at the Undergraduate Division.

On the basis of information obtained from interviews and scientific tests of aptitude, achievement, interest and personality, these counselors help the student answer questions such as: Do I have the necessary aptitudes, interest, and personality characteristics for the course of study and for the vocation I am considering? What is the probable

Dr. Paul C. Greene, Director of the Student Counseling Bureau, advising student on program

demand for workers in the vocation I am planning to enter? What grades should I expect to earn at the University? How can I improve my concentration, and speed up my reading ability?

In addition to such vocational and educational questions, the Bureau also provides counseling services for all types of personal and psychological questions such as overcoming fear of examinations, speech problems, and lack of friends, and needs for increased personal effectiveness. All the following services are important aspects of the Student Counseling Bureau's work with students.

Freshman Guidance Testing	Occupational Information
Individual Testing	Selection of College Majors
Reading and Study Skills Counseling	Personal Problems Counseling

University students can make an appointment for the suggested types of services at the Bureau's reception desk in Room 300. High school seniors and graduates should make requests for services through the Office of Admissions and Records.

Counseling facilities of the offices of the Dean of Students, the Dean of Men, the Dean of Women, and the Student Counseling Bureau are available to students at all times during their college work at the Chicago Undergraduate Division. Students are urged to discuss specific

educational problems with their instructors. Members of the instructional staff hold weekly office hours for conferences with individual students.

DEAN OF STUDENTS

The Dean of Students is in charge of most matters of student welfare and extracurricular activities. As part of his organization the Dean of Men, the Dean of Women, and their assistants are advisors to whom students may turn for assistance and advice. Details of these counseling services are given in the following sections.

In addition, the Dean of Students is the administrative officer responsible for all extracurricular activities and is charged with the coordination of the extracurricular programs of the recognized student clubs and organizations. He is also advisor to foreign students at the Chicago Undergraduate Division.

In connection with the responsibility for student welfare, the Dean of Students is authorized to attend sessions of the Disciplinary Committee, but has no vote.

DEAN OF MEN

The Office of the Dean of Men is organized for the primary purpose of aiding men students. The work of the Dean of Men is in counseling students and advising them on any matters which they wish to bring to him. He is available for individual conferences with students daily. The Dean of Men takes an active part in student extracurricular affairs through his assignments as the secretary of the Committee on Student Affairs, chairman of the Administrative Committee on Finance and Audit for Student Organizations, and secretary of the Student Organizations Fund. He also serves as advisor to Phi Eta Sigma, national scholastic honorary for first-year men students, and as recording secretary to the Parents Association.

The Student Employment Division, which assists needy students with contacts for part-time employment, and the Hospital and Medical Service plan are under the supervision of the Dean of Men. Attendance records for both veteran and non-veteran students are maintained by the Office of the Dean of Men.

DEAN OF WOMEN

The Office of the Dean of Women is the clearing place for the problems of women students. Students are urged to come with questions that inevitably arise—social, personal, academic, or financial.

In addition to the friendly, sympathetic counseling of women students, the Dean of Women serves as the advisor to women's organizations at the Chicago Undergraduate Division; as sponsor of Alpha Lambda Delta, national scholastic honorary for freshmen women, Activities Honorary Society, and University Dance Committee.

All student social events are coodinated and unified through her office in her capacity as chairman of the Administrative Committee on Social Events, Calendar, and Recreation. She offers helpful assistance to student groups in organizing dances, entertainments, special events, and other all-University functions.

Scholarships

Several types of scholarships are available to undergraduate students in the University of Illinois. On the basis of competitive examinations open to high school graduates each June, a few four-year tuition scholarships are awarded in each county in Illinois. Service in the Armed Forces entitles many veterans to the Military Scholarships. Each member of the General Assembly may nominate annually one student from his district for a scholarship. In addition, a number of scholarships are awarded by the University Scholarship Committee each spring for the following school year. All the scholarships offered, and the individual requirements, are listed in an information folder available upon request from the Office of Admissions and Records at Navy Pier.

Undergraduate scholarships usually cover tuition charges only. Although some are available only to students in a specific course, the majority may be used in any of the colleges. Students now enrolled may apply for a scholarship for any year; a few scholarships, however, may be awarded only to applicants without college experience. Information regarding scholarships may be obtained from the Office of the Dean of Students or the Office of Admissions and Records, Room 15.

Loan Funds

Loan funds are of two general classes: (1) emergency loan funds, and (2) long term or regular loan funds. Most of these funds have special qualifications which must be met by applicants.
Detailed information regarding loan funds may be obtained from the Office of the Dean of Men.

Student Employment

For students who find it necessary to earn a portion of their expenses, the Student Employment Division in the Office of the Dean of Men provides information and assistance to students desiring part-time jobs, both in University offices and in industry and business in the Chicago area. Applications for part-time jobs should be filed with the Student Employment Manager, Room 313.

The student who expects to be employed will find it to his advantage to arrange his class schedules, at the time of registration, so that consecutive hours are free each day. Employment for the first-year student should be a matter of necessity rather than choice.

Hospital and Medical Service

A Hospital and Medical Service fee of five dollars is charged each student at the time of registration to provide ward care in an approved hospital for a period not to exceed twenty-eight days in any semester. In addition, while confined to a hospital or to home, a substantial payment is made toward the attending physician's charges, usually sufficient in the case of minor illnesses to give complete protection. There is also an allowance for laboratory tests, anesthetic or administration thereof, use of operating room, medicine, drugs, dressings, and X-rays. The Hospital and Medical Service plan is under the supervision of the Dean of Men. All questions pertaining to this insurance should be directed to the Dean of Men, University of Illinois, Navy Pier, Chicago 11, Illinois.

Note: A student who presents evidence of participation in any other group insurance system providing the same benefits as those covered by the University fee may petition, through the Office of the Dean of Men *during the first ten days of instruction,* for a refund of this fee.

HEALTH SERVICE

The University maintains a Student Health Service to promote better physical and mental health among the students at the Chicago Undergraduate Division. Physical examinations, given by the staff of the University Health Service, are required of all students prior to the time of their first registration and each year thereafter. Chest X-rays are required as part of the physical examination. Immunizing inoculations for smallpox, tetanus, diptheria, influenza, and typhoid fever are available to students free of charge.

Counseling and diagnosis—Health Service

The staff of five physicians instruct classes in hygiene and sanitation. As the functions of the Health Service are primarily educational and preventive, its staff does not assume responsibility for the care of students beyond giving medical advice, emergency treatment, and vaccinations. It is emphasized that advice to students contemplates a real concern for the best treatment whenever indicated and that the discussion of student welfare problems with the staff of the Student Health Service is encouraged. Members of the staff are available at all times for conferences with the students about individual health problems. The Health Service is located on the third floor at the east end of the Pier. The office is open from 8 a.m. to 5:30 p.m. daily and during vacation periods.

DIVISION OF SPECIAL SERVICES FOR WAR VETERANS

The University of Illinois Division of Special Services for War Veterans has established an office at the Chicago Undergraduate Division for the purpose of assisting the veteran in returning to civilian life, but it does not register students as on the Urbana campus. Instead, a counselor in this office assists the veteran in making educational adjustments and guides him in his search for the curriculum which will best satisfy his needs.

Through the Examiner and Recorder of the Chicago Undergraduate Division, the veteran can ascertain to what extent he may meet entrance requirements by credit for service or for courses taken through the United States Armed Forces Institute. Credit in military science, physical education, and hygiene will be granted to any veteran, honorably discharged, who presents evidence that he has completed the basic training program in the Army, Navy, Marine Corps, or Coast Guard. Credit for work taken in college training programs in technical schools, and in courses pursued while the veteran was in service, may be transferred upon the basis of evaluation by the Examiner and Recorder.

EXTRACURRICULAR ACTIVITIES

Student extracurricular activities are recognized as an important part of the student's life and are encouraged in part as an adjunct to curricular courses; to develop individual talents in speech, music, drama, journalism, radio production, etc.; and to develop qualities of leadership, personality, and character. Many student clubs and organizations are active on the campus. These groups sponsor varied social and cultural activities for the benefit of the entire student body. All questions pertaining to extracurricular activities should be directed to the Dean of Students.

The Committee on Student Affairs is an official body appointed to assist the Dean of Students in the development and supervision of student extracurricular and student government activities.

The student government organization, the Student Congress, is comprised of four officers and fourteen representatives selected by vote of the entire student body at general elections each year. Officers of the Congress serve with the Committee on Student Affairs.

Joint student-faculty administrative committees supervise the operating policies of student organizations. These committees are composed of a faculty representative of the Committee on Student Affairs and two members of the Student Congress.

Students are provided an opportunity for experience in journalism through the weekly student newspaper, the *Pier Illini,* written and edited entirely by students. Engineering students edit the Chicago Undergraduate Division section of the *Illinois Technograph,* the University of Illinois engineering periodical.

Supplementing classroom work, three language clubs, the Pershing Rifles, the Commerce Club, the Veterans-Illini Club, the International Relations Club, and the Cadet Association provide cultural programs for the students. Engineering, architecture, chemistry, and pre-medical students may take part in the activities of their respective professional societies, several of which are affiliated with national professional organizations.

Students interested in music and drama may seek membership in the University Choir, the Pier Playhouse, the Radio Club, or the Band. Extracurricular organizations in athletics and physical education include the Varsity Lettermen's Club, Orchesis, the modern dance organization, and the Women's Athletic Association.

All-University dances are sponsored by the University dance committee. Other varied student interests include a chess club, a photography club, and an amateur radio organization.

Honorary scholastic societies include Alpha Lambda Delta for freshman women and Phi Eta Sigma for freshman men.

THE SPEECH CLINIC

The services of the Speech Clinic are available to those students who want assistance in correcting speech difficulties and to students who desire to increase their effectiveness and fluency in talking to others. Students who stutter, lisp, have foreign accents, hearing deficiencies, or voice problems are aided by the clinic. The clinic also assists students with the problems that sometimes arise in appearing and talking before groups. Students planning theatrical or teaching careers are aided in meeting professional speech requirements.

The clinic is equipped with modern testing instruments and the staff is scientifically trained in diagnosis and treatment. Students may consult with the Speech Clinic by making appointments in Room 300, the Student Counseling Bureau office. No charge is made for the service.

DEBATING

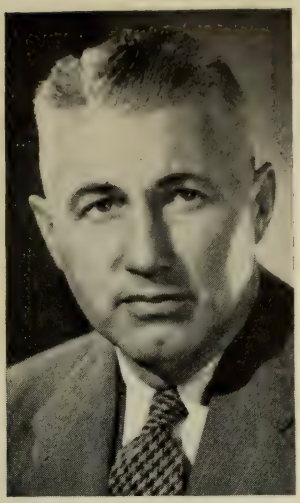
The forensics program at the Chicago Undergraduate Division provides an opportunity for students to gain experience in debating and discussion. All students, including those without previous experience, may take part in the forensics activities.

The debating program begins each fall with an instructional program for newcomers and an intramural tournament. From mid-November to mid-April a full schedule of intercollegiate competition is maintained. In addition to Chicago-area colleges and universities which come to the Chicago Undergraduate Division for debates, guest teams from outside the city have included colleges and universities from Florida, Indiana, Iowa, Michigan, Missouri, Ohio, and Wisconsin. Debaters from Navy Pier also attend tournaments in Illinois and nearby states where they meet debaters from schools throughout the country.

Since its organization in 1947, the debate team has engaged in both junior and senior college competition, where the team has won honors and has maintained an excellent competitive record.

Problems of national and international interest are the topics for the forum discussions conducted as part of the forensics program. During the school year, the forum discussions are held every two weeks with speakers from visiting colleges and universities. A number of major universities and colleges in Illinois and adjacent states have participated in the forums. The talks by speakers from the Chicago Undergraduate Division and from the visiting schools are followed by audience participation periods.

Debating and the forum discussions are under the supervision of the Forensic Council, a faculty committee appointed by the Dean of the Chicago Undergraduate Division. Members of the faculty of the speech department work directly with student participants.



John O. Jones
Director of Athletics

ATHLETICS

The Chicago Undergraduate Division participates in ten varsity sports—football, basketball, baseball, cross-country, track, wrestling, swimming, gymnastics, tennis, and golf. In accordance with a special ruling, freshmen in good standing are allowed to participate in varsitv sports.

A special feature is the extensive intramural program in which students can elect to take part in boxing, wrestling, badminton, table-tennis, volleyball, basketball, gymnastics, handball, weight lifting, tennis, track, and softball. The intramural and intercollegiate programs are under the supervision of an athletic sub-committee of student and faculty representatives. Both programs are financed through funds from student activities fees.

The Chicago Undergraduate Division Gymnasium, adjacent to the west end of Navy Pier, is the center of the intramural and physical education programs. Basketball games, wrestling meets, and gymnastics meets are also held in the huge gymnasium which has floor space for eight full-size basketball courts.

A staff of 14 coaches directs the Chicago Undergraduate Division athletic activities. Varsity letter awards are made to athletes who meet the participation requirements of intercollegiate competition, to sophomore managers, and to sophomore cheerleaders.

UNIVERSITY SERVICES

UNIVERSITY LIBRARY

The Library of the Chicago Undergraduate Division is outstanding among the newer college libraries of the nation. Although only seven years old, it contains nearly 70,000 volumes, all of which have been carefully chosen with the institution's undergraduate curricula in mind, as well as the general and recreational interests of students and faculty. Orders for new books are being placed constantly, so that it is expected that the Library will contain 100,000 selected volumes within the next few years.

Advisement and instruction department of the Library

While no attempt will ever be made to duplicate scholarly research facilities already available in the city, strong emphasis is placed on general reference, library instruction, and readers' advisory service, with close liaison maintained with the teaching program and student activities.

An exceptional collection of general and special encyclopedias, atlases, bibliographies, dictionaries, handbooks, yearbooks, and directories (6,000 volumes) has been assembled. A complete dictionary catalog is provided and 30 periodical indexing services are available. The subscription list includes nearly 600 magazines and journals. Twenty-year back files of 250 particularly useful periodicals have already been bound for permanent reference use and are available on open shelves. An extensive vertical-file pamphlet collection, excellent microfilm reading facilities, vocational guidance materials, and college catalogs are also provided.

The Library has three service areas. The open-shelf Main Reading Room is located on the second floor at the east end of the Pier. It offers liberal reference and circulation facilities, in addition to well-lighted study space for 700 students. The Reserve Book Station, located near the street car line, makes assigned reading materials conveniently available. The Fine Arts Reading Room (Room 246) offers special facilities in architecture and art. The Library staff of 26 includes 12 trained librarians, with academic rank, and 14 full-time clerks. Library hours are 8:30 a.m. to 5 p.m., Monday through Friday.

UNIVERSITY BOOKSTORE

The University Bookstore is operated by the University to provide faculty approved texts and supplies as required by the various courses at the Chicago Undergraduate Division.

The Bookstore is located at Room 87. It is open daily, Monday through Friday, from 8:30 a.m. to 4:30 p.m. During the registration period, the Bookstore is open 8 a.m. to 6 p.m.

FOOD SERVICE

The University operates non-profit food service facilities for the convenience of students, faculty, and staff The student cafeteria serves well-balanced, low-cost lunches and breakfasts. The cafeteria is located at the east end of the Pier. A soda fountain, serving sandwiches and beverages, is operated in connection with the cafeteria.

A popular student spot between classes is the snack bar located at the entrance to the Pier, adjacent to the reception lounge. In addition, a dining room at the east end of the Pier offers cafeteria-style service to members of the faculty and staff.

COURSES REQUIRED OF ALL STUDENTS

The following course requirements must be met by all students registered at the Chicago Undergraduate Division. These subjects are to be begun in the first semester of the freshman year, except as otherwise provided, and are to be continued until these requirements are completed.

1. Hygiene—One semester. Credit may be obtained by a proficiency examination. (Veteran students who have completed basic training in the Army, Navy, Marine Corps, Coast Guard, or Merchant Marine receive credit for hygiene.) Transfer students having sophomore standing are exempt from hygiene.

2. Physical Education—Four semesters. **Women** students entering the University as freshmen are required to obtain credit for four semesters of work in physical education; those entering the University with 30 to 55 semester hours of transfer credit are required to obtain credit for two semesters of work in physical education. This requirement must be met even though the student has been granted two or less hours of transfer credit in physical education. However, if the student transferring with 30 to 55 semester hours of transfer credit is granted three hours of transfer credit in physical education, then only one additional semester hour of physical education must be completed at the University; and, if the student is granted four hours of transfer credit in physical education then that student will not be required to take any additional physical education at the University.

Men entering the University with less than 56 semester hours of credit are required to secure four semesters of credit in physical education, including the amount transferred. (Veteran students who have completed basic training while in the service are exempted.)

Physical education may be deferred only by written request through the Physical Education Department which will make recommendations to the dean of the student's college.

3. Rhetoric—Two semesters (Rhetoric 101 and 102). All students entering the University as freshmen direct from secondary schools are required to take a placement test in rhetoric. A satisfactory proficiency in the use of written English is a requirement for all undergraduate degrees. Students who receive grades of "C" or "D" in Rhetoric 102, or its equivalent, are required to take an English qualifying examination before graduating. Those who fail to pass the qualifying examination are required to pass an extra semester course in rhetoric (Rhetoric 200).

The Grading System

The following grades are given in the University of Illinois:

A—Excellent

B—Good

C—Fair

D—Poor (lowest passing grade)

E—Failure

The University does not use plus or minus signs with the letter grades. Further, there are no numerical equivalents.

A student with a failure may have a special examination on the recommendation of the head of the department approved by the dean of his college, and on payment of a fee of $5.00, or he may take courses in sequence, with the approval of the department.

Other symbols in use are:

W—Withdrawn from the course without penalty.

Ex—Absent from the final examination for reasons acceptable to the dean of the college concerned and hence "Excused." (Entitles the student to an examination later without fee, but becomes a failure if not removed during the first semester that the student is registered following the giving of the grade of "Ex.")

Ab—Absent from the final examination without excuse acceptable to the dean of the college concerned (this grade is construed to be a failure). A student may remove an "Ab" grade from his record by taking a special examination, fee $5.00, during the next semester in which he is in residence, but not to be taken within ten days of the final examination period.

Inc—The grade of "Incomplete" is no longer authorized except in the required work in physical education. Except in this department instructors are required to assign a definite grade representing both the quality and the quantity of the work accomplished.

Grade-Point Average

In computing the grade point average, weighted values are given to the grades as follows: A=5 grade points; B=4; C=3; D=2; E=1; Ab=1. To compute the grade-point average, multiply the number of hours of each grade by the weight, add the products, and divide by the number of hours. Thus, if you earn 3 hours of A, 6 of B, 3 of C, 2 of D, and 4 of E, the computation of your grade-point average is as follows:

Grade	*Hours*	*Weight*	*Grade Points*	
A	3	5	15	
B	6	4	24	
C	3	3	9	
D	2	2	4	
E	4	1	4	
	18		56	$\frac{56}{18} = 3.111$

Your grade-point average is 3.111.

Robert P. Hackett, Associate Dean
Commerce and Business Administration

COLLEGE OF COMMERCE AND BUSINESS ADMINISTRATION

Through knowledge of modern business practices and the fundamental principles on which economic systems operate, the College of Commerce and Business Administration seeks to develop in students the intellectual powers necessary for administrative careers. For this purpose it offers a unified program of basic studies for freshmen and sophomores. Though the factual contents of many of the courses are directly useful in specific vocations, students should expect to serve an apprenticeship in the fields they enter after graduation from this college if they wish to prepare themselves for higher positions.

While concentrating in a special field, students are encouraged to elect courses offered in other colleges of the University and to secure as liberal an education as possible to avoid the narrowing effects of early specialization.

The courses required and available in the first two years in this College are primarily organized to serve as a foundation for building the study in a field of concentration in the junior and senior years.

Students who have completed this two-year program with a satisfactory scholastic record are qualified for admission to the Upper Division of the College of Commerce and Business Administration or for admission to the College of Education, or the College of Law, or the School of Journalism and Communications. Students transferring to other colleges after completing only the two-year program of the College of Commerce receive their degrees not from the College of Commerce and Business Administration, but from the college to which they transfer on completing the requirements of that college.

Another group of students has not been forgotten. This group comprises those who will not be able to attend school for more than one or two years. The program is so arranged that the maximum benefit of basic business knowledge can be obtained in that more limited period.

SUMMARY OF REQUIREMENTS FOR GRADUATION

A candidate for the degree of Bachelor of Science in a field of the College of Commerce and Business Administration must:

1. Fulfill general University requirements as to registration, residence, scholarship, and fees.

2. Have a total of 130 credit hours of which not less than 60 credit hours must be in Accountancy, Business Law, Economics, Management, and Marketing. Secretarial Training courses may be included in the fields of Commercial Teaching and Secretarial Training. In Commercial Teaching and Commerce and Law only 45 such hours are required, while in Industrial Administration the number of such hours is 50.

3. Complete courses included in University requirements, College General Education requirements, and College General Business requirements. (See pages 37 and 38.)

4. Complete the requirements for one of the Fields of Concentration. (See page 38.)

5. Have a minimum average of 3.0 for all courses counted toward graduation.

ELECTIVES

Whenever a program for any session includes all possible required courses at that time, and it seems desirable to add other courses to make a reasonable number of hours, certain electives are recommended. Prerequisites for these electives should be observed carefully. These electives should be directed toward requirements in the Upper Division. They include management, marketing, anthropology, history, philosophy, political science, psychology, and sociology, as well as additional courses in mathematics, science, English, or foreign language. Any advice desired on these electives may be obtained at the office of the dean or from the advisor at the time of registration.

COMMERCE AND LAW

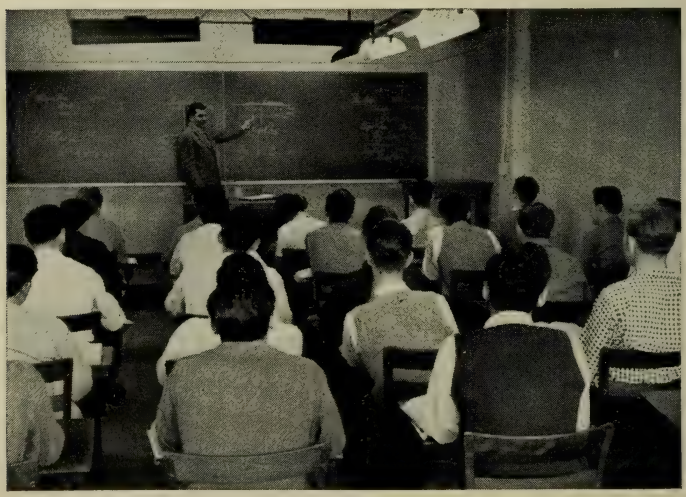
Students interested in obtaining a legal education may take their pre-legal work in the College of Commerce and Business Administration. This preparation should be of particular interest to students looking forward to some phase of the legal practice involving business or corporation law. The first two years are the same as the program for the Lower Division shown on page 37. The third year includes requirements of special value to the pre-law student. The courses involved here include commerce courses as well as those in political science, history, and philosophy.

When a student has completed 100 hours in the College of Commerce and Business Administration and 30 hours in the College of Law, including all required courses, he will be granted the degree of Bachelor of Science in Commerce and Law. Upon completion of the requirements of the two remaining years in the College of Law, the law degree will be granted.

COMMERCIAL TEACHING

Since there are certain state requirements for certification of teachers in Illinois high schools, a special program to meet these requirements for commercial teachers has been established in the College of Commerce and Business Administration. The approved program for this field for the first two years is shown on page 39.

Lesson in accountancy



PRE-JOURNALISM

Students desiring to enter the School of Journalism and Communications may do so after the completion of two years with proper grade average in the College of Commerce and Business Administration. Those interested in advertising and other business phases of journalism may find consideration of this program profitable. The two-year program for this purpose is the same as that shown on page 37.

REQUIREMENTS FOR ALL COMMERCE STUDENTS

(Except Commercial Teaching)

I. University Requirements. *All available at the Chicago Undergraduate Division.*	Credit Hours	Normal Semester
Hygiene	2	2
Military[1]	4	1, 2, 3, 4
Physical Education	4	1, 2, 3, 4
Rhetoric 100[2], 101, 102	6	1, 2, (3)
Total	16	
II. College General Education Requirements. *All available at the Chicago Undergraduate Division.*		
Economics 136—Economic History of the United States or Economics 138—Introduction to the Economic History of Modern Europe or Geography 105—Introductory Economic Geography	3[3]	1
Economics 100—Introduction to Business (*strongly recommended*)	(3)[3]	2
Literature or Language[4]	6	1, 2, 3 or 4
Mathematics 103—Introduction to College Algebra and Mathematics 112—College Algebra[5]	0 to 6	1, 2
Rhetoric 151—Business Letter Writing	3	3 or 4
Science or Advanced Mathematics[6]	4	1 or 2
Secondary List (Anthropology, History, Philosophy, Political Science, Psychology, or Sociology)	6	3 or 4
Speech 101—Principles of Effective Speaking	3	1, 2, 3 or 4
Additional hours in Language, Literature, Advanced Mathematics, Science, on the Secondary List to bring the total of this group, excluding Economics 100, to 39 credit hours	0 to 17	
Total	39	

[1]Not required if first 60 credit hours are taken at the Chicago Undergraduate Division.
[2]Not required unless placement examination so indicates.
[3]For freshmen only. Students with 30 credit hours or more should not take this course.
[4]If literature is elected, 6 hours of American or English literature will satisfy the minimum requirement. If language is elected, it must be a modern foreign language and the equivalent of four semesters when pursued in college must be taken to satisfy graduation requirements.
[5]A student should always be guided by his placement examination but, in general, one who has one year of high school algebra must take Math. 103 followed by Math. 112; one who has one and one-half years of high school algebra must take Math 112; and one who has two years of high school algebra need not take any College Algebra unless he wishes.
[6]If science is elected it may be any laboratory science (Geography is not included here). If mathematics is elected it may be any course in advance of College Algebra, Trigonometry included.

III. College General Business Education Requirements.
*All except those * are available at the Chicago Undergraduate Division.*

	CREDIT HOURS	NORMAL SEMESTER
Accountancy 101 or 102—Principles of Accounting	3 or 2	1
Accountancy 105—Accounting Procedure	3	2
Accountancy 106—Elementary Cost Accounting (*recommended*) or Accountancy 108—Intermediate Accounting	3	3
Business Law 100—Basic Principles of Business Law	3	4
Economics 102, 103—Principles of Economics	6	3, 4
Economics 170—Elements of Statistics	3	4
Economics 250—Money, Credit, and Banking*	3	
Economics 254—Business Finance*	3	
Management 101—Industrial Organization and Management	3	4
Marketing 101—Principles of Marketing	3	4
Economics—electives*	6	
Total	39 or 38	

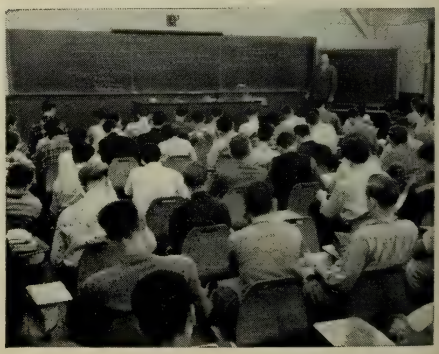
IV. Field of Concentration Requirements and Free Electives.

Sufficient credit hours must be taken here to make a grand total of 130 credit hours. *None of the required courses in the fields of concentration are available at the Chicago Undergraduate Division.*

Fields of Concentration:

Accountancy
Commerce and Law
Commercial Teaching (Special program)
Economics of Government and Business, Public Utilities and Transportation Economic Theory
Finance
General Economics (8 sub-fields)
Industrial Administration
Insurance (2 sub-fields)
Labor Economics
Management
Marketing (9 sub-fields)
Personnel Management (3 sub-fields)
Secretarial Training
Statistical Economics (6 sub-fields)

Further information about any of these fields of concentration or any other academic questions arising in connection with any of the above material should be directed to the Associate Dean in charge of the College of Commerce and Business Administration, Room 27.



Lecture in Economics

CURRICULUM PREPARATORY TO TEACHING COMMERCIAL SUBJECTS

First Year

FIRST SEMESTER	HOURS
Rhet. 101—Rhetoric and Composition	3
Accy. 101—Principles of Accounting	3
Econ. 136—American Economic History or Econ. 138—Euro-	
Math. 112—College Algebra[1]	3
Biology 101—Fundamentals of Biology	4
Physical Education	1
Total	17

SECOND SEMESTER	HOURS
Rhet. 102—Rhetoric and Composition	3
Econ. 100—Introduction to Business	3
Biology (choice)	4
Hygiene 101 or 104	2
Educ. 101—Nature of Teaching Profession	2
Accy. 105—Accounting Procedure	3
Physical Education	1
Total	18

Second Year

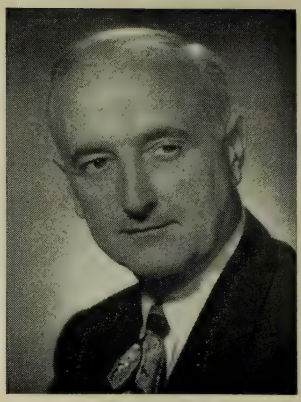
FIRST SEMESTER	HOURS
Speech 101—Principles of Effective Speaking	3
Econ. 102—Principles of Economics	3
Sociol. 100—Principles of Sociology	3
Geog. 105—Introduction to Economic Geography	3
Accy. 106—Elementary Cost Accounting	3
Physical Education	1
Total	16

SECOND SEMESTER	HOURS
Econ. 103—Principles of Economics	3
Hist. 152—History of the United States	3
Mktg. 101—Principles of Marketing	3
Psych. 100—Introduction to Psychology	4
Elective[2]	3
Physical Education	1
Total	17

[1]May require adjustment if entrance credit includes only one unit of high school algebra.

[2]This could include: Business Law 100, Political Science 150, or Rhetoric 151 as specific requirements; Accountancy 108, American or English Literature, or Philosophy 105 as option electives; Marketing 101 as a free elective.
Whichever ones chosen would affect the junior or senior program in that respect.

Solving problems in statistics



Frederick W. Trezise, Associate Dean
Engineering Sciences

COLLEGE OF ENGINEERING

To prepare men for professional work in engineering and architecture and for responsible positions of a technical and semi-technical character in industry, commerce, and government, the College of Engineering at the Chicago Undergraduate Division provides training in the mathematical and physical sciences and their applications to the design, construction, and operation of industrial plants, buildings and homes, and public and private works of all kinds.

The curricula in this college, though widely varied and specialized, are built on a general foundation of scientific facts and theories applicable to many different fields. Work in the classrooms, laboratories, shops, and drafting rooms is correlated by practical problems which the students solve by methods similar to those of practicing architects and engineers. The courses in architecture in the College of Engineering are offered under the Department of Architecture and Art. A discussion of the curricula in architecture is presented following the curricula in engineering.

In addition to the fundamental and technological courses in each curriculum, some cultural courses are required, such as history, economics, and rhetoric, and others are elective, so that each student may broaden his program. While each student pursues a curriculum of his own choice according to the field of his particular interest, all students must take certain courses. Basic courses in mathematics, chemistry, physics, rhetoric, and general engineering are required in the first two years.

At the Chicago Undergraduate Division the first two years of courses are offered in the following fields: aeronautical engineering, ceramic engineering, civil engineering, electrical engineering, engineering physics, general engineering, mechanical engineering, metallurgical engineering, and mining engineering. Those few advanced courses which are not available here are properly noted.

Instruction in all courses is designed primarily to prepare the student to enter the College of Engineering on the Urbana campus of the University of Illinois in his third year.

SUMMARY OF REQUIREMENTS FOR GRADUATION

Students in the College of Engineering who meet the University's general requirements with respect to registration, residence, and fees, and who maintain satisfactory scholastic records in this college, are awarded degrees appropriate to their curricula. Each curriculum requires a minimum of 136 semester hours of credit, not counting the required work in military science and physical education.

Each curriculum leads to the degree of Bachelor of Science and may ordinarily be completed in four years. A graduate of one curriculum ordinarily can qualify for another baccalaureate degree by doing a fifth year of work, consisting of 30 to 36 semester hours, acceptable to the faculty of this college, providing plans have been made looking toward such an arrangement at the beginning of his third year.

A graduate of the College of Liberal Arts and Sciences, or any other college of equal standing, who has adequate training in mathematics, physics, and mechanics to enable him to begin the third year of a curriculum in the College of Engineering, can usually qualify for the degree of Bachelor of Science from this college by two and one-half years of work.

ELECTIVES AND OPTIONS

Non-technical electives for students in the College of Engineering include all courses offered in the College of Liberal Arts and Sciences, the College of Commerce, and certain courses in the College of Engineering. Technical electives include practically all courses in the College of Engineering not required in the student's curriculum, except all elementary work in drawing.

Departmental electives and technical options are restricted to courses of a technical character as listed under this classification by each department. Options are groups of related courses in a special field of subject matter.

Most of the curricula in the College of Engineering provide an opportunity for concentration of the students effort in the senior year along lines of his particular interest, within the broad field of his chosen curriculum. This is accomplished by curriculum options, which are groups of subject-matter related to recognized fields of concentration in professional engineering practice.

COMMON PROGRAM FOR FRESHMEN

First Year

New Common Program for Freshmen
(Effective September 1, 1953)

FIRST SEMESTER	HOURS	SECOND SEMESTER	HOURS
Chem. 102 or 103—General Chemistry	3 or 4	Chem. 104—Chemistry of Metallic Elements	4
G.E. 101—Elements of Drawing	3	G.E. 102—Descriptive Geometry	3
Math. 123—Analytic Geometry..	5	Math. 133—Calculus[1]	3
Hygiene 101—Personal and Environmental Hygiene	2	Physics 106—Mechanics	4
Rhet. 101—Rhetoric and Composition	3	Rhet. 102—Rhetoric and Composition	3
Engineering Lectures 100	0	Physical Education	1
Physical Education	1		
Total	17 or 18	*Total*	18

CURRICULUM IN AERONAUTICAL ENGINEERING

First Year

Common Program for Freshmen (above).

Second Year

FIRST SEMESTER	HOURS	SECOND SEMESTER	HOURS
Math. 143—Calculus[2]	5	Met. E. 160 (New Course)[1]	3
M.E. 182—Manufacturing Processes	3	Physics 108—Heat, Sound, Light	4
Physics 107—Electricity and Magnetism, Modern Physics	4	T.A.M. 156—Analytical Mechanics (Statics and Dynamics)	5
Modern History or Political Science	3 or 4	Modern History or Political Science	3 or 4
Physical Education	1	Physical Education	1
Total	16 or 17	*Total*	16 or 17

[1]Offered for first time February, 1954.
[2]Offered for first time September, 1954.

CURRICULUM IN CERAMIC ENGINEERING

First Year

Common Program for Freshmen (page 42).

Second Year

FIRST SEMESTER	HOURS
Cer. E. 101—Introduction to Ceramic Engineering[1]	3
Chem. 123—Quantitative Analysis[2]	5
Math. 143—Calculus[3]	5
Physics 107—Electricity and Magnetism, Modern Physics	4
Physical Education	1
Total	18

SECOND SEMESTER	HOURS
Cer. E. 102—Ceramic Processes and Equipment[1]	3
Geol. 130—Mineralogy for Engineers[1]	3
Physics 108—Heat, Sound, Light	4
T.A.M. 154—Analytical Mechanics (Statics and Dynamics)	4
Technical or Nontechnical Electives	3
Physical Education	1
Total	18

CURRICULUM IN CHEMICAL ENGINEERING

This curriculum is administered by the College of Liberal Arts and Sciences. See pages 53-56.

CURRICULUM IN CIVIL ENGINEERING

First Year

Common Program for Freshmen (page 42).

Second Year

FIRST SEMESTER	HOURS
C.E. 105—Plane Surveying[3]	2
C.E. 160—Building Construction	3
Math. 143—Calculus[3]	5
Physics 107—Electricity and Magnetism, Modern Physics	4
G.E. 111—Advanced Drafting for Civil Engineers[3]	2
Physical Education	1
Total	17

SECOND SEMESTER	HOURS
C.E. 106—Surveying[4]	3
Geol. 150—Engineering Geology	3
Physics 108—Heat, Sound, Light	4
T.A.M. 150—Analytical Mechanics (Statics)	2
Nontechnical Electives	3
Physical Education	1
Total	16

Summer Surveying Camp (C.E. 207—5 hours) follows Second Year

[1]Not offered at Chicago Undergraduate Division; must be taken at Urbana.
[2]Not offered at Chicago Undergraduate Division; substitute Chem. 122—Elementary Quantitative Analysis.
[3]Offered for first time September, 1954.
[4]Offered for first time February, 1955.

CURRICULUM IN ELECTRICAL ENGINEERING

First Year

Common Program for Freshmen (page 42).

Second Year

FIRST SEMESTER	HOURS	SECOND SEMESTER	HOURS
Econ. 108—Elements of Economics	3	E.E. 126—Electric Circuits and Fields	4
Math. 143—Calculus[1]	5	Physics 108—Heat, Sound, Light	4
Physics 107—Electricity and Magnetism, Modern Physics	4	T.A.M. 154—Analytical Mechanics (Statics and Dynamics)	4
Speech 101—Principles of Effective Speaking	3	Econ. 248—Personnel Administration	3
Physical Education	1	Physical Education	1
Total	16	*Total*	16

CURRICULUM IN ENGINEERING PHYSICS

The purpose of this curriculum is to prepare students for investigations in engineering problems calling for a knowledge of physics and mathematics or chemistry, and for positions in certain industries which prefer men with a thorough education in basic science.

Students in the engineering physics curriculum, when registering for advanced undergraduate courses in physics at any stage in that curriculum, must have a grade average of at least 3.5 in all subjects, exclusive of the basic courses in military training and physical education, and a combined grade average of at least 3.5 in all subjects, in mathematics and physics taken prior to such registration. Transfer students must have a corresponding record in the institution from which they transfer, and must maintain such status at the University of Illinois.

First Year

Common Program for Freshmen (page 42).

Second Year

FIRST SEMESTER	HOURS	SECOND SEMESTER	HOURS
Physics 107—Electricity and Magnetism, Modern Physics	4	Physics 108—Heat, Sound, Light	4
Math. 143—Calculus[1]	5	Physics 341—Electricity and Magnetism	4
German, *or* Nontechnical Electives[2]	4	German, *or* Nontechnical Electives[2]	4
Nontechnical Electives[2]	3	Math. 343—Advanced Calculus[3]	3
Physical Education	1	Physical Education	1
Total	17	*Total*	16

[1]Offered for first time September, 1954.

[2]It is suggested that the nontechnical electives be chosen from the social sciences (i.e., anthropology, history, political science, psychology, and sociology) or the humanities (i.e., art, classics, English, humanities, music, and philosophy).

[3]Math. 341 may be substituted for Math. 343.

CURRICULUM IN GENERAL ENGINEERING

This curriculum provides a fundamental engineering training with moderate emphasis on design and a fixed requirement of fifteen hours in economics, corporation finance, engineering law, and labor problems. Specialization in any field of the student's choice is permitted in the liberal provisions for elective studies, as well as an option by means of which he may elect either structural or machine design. The curriculum is intended for students who do not wish to pursue the more specialized engineering curricula, but who wish to ally themselves with industrial and commercial development in the fields of management, operation, and construction—preparation for which is founded on scientific and engineering facts and disciplines, supplemented by economic and social orientations. A sales engineering option can be readily planned within the elective framework of the curriculum.

First Year

Common Program for Freshmen (page 42).

Second Year

FIRST SEMESTER	HOURS	SECOND SEMESTER	HOURS
Econ. 108—Elements of Economics	3	C.E. 115—General Surveying, *or* M.E. 183—Materials Casting	3
Math. 143—Calculus[1]	5	M.E. 184—Metal Processing	3
M.E. 183—Materials Casting, *or* C.E. 115—General Surveying	3	Physics 108—Heat, Sound, Light	4
Physics 107—Electricity and Magnetism, Modern Physics	4	Speech 101—Principles of Effective Speaking	3
Physical Education	1	T.A.M. 150—Analytical Mechanics (Statics)	2
		Nontechnical Electives	2
Total	16	Physical Education	1
		Total	18

CURRICULUM IN INDUSTRIAL ENGINEERING

First Year

Common Program for Freshmen (page 42).

Second Year

FIRST SEMESTER	HOURS	SECOND SEMESTER	HOURS
M.E. 183—Materials Casting, *or* M.E. 184—Metal Processing	3	M.E. 184—Metal Processing, *or* M.E. 183—Materials Casting	3
Econ. 108—Elements of Economics	3	G.E. 112—Advanced Drafting for Mechanical Engineers[2]	2
Math. 143—Calculus[1]	5	Math. (new)[3]	3
Physics 107—Electricity and Magnetism, Modern Physics	4	Physics 108—Heat, Sound, Light	4
T.A.M. 150—Analytical Mechanics (Statics)	2	T.A.M. 211—Analytical Mechanics (Dynamics)	3
Physical Education	1	Nontechnical Electives	2
		Physical Education	1
Total	18	*Total*	18

[1]Offered for first time September, 1954.
[2]Offered for first time February, 1955.
[3]This course will be available in the fall of 1953.

CURRICULUM IN MECHANICAL ENGINEERING

First Year

Common Program for Freshmen (page 42).

Second Year

FIRST SEMESTER	HOURS	SECOND SEMESTER	HOURS
M.E. 183—Materials Casting, *or* M.E. 184—Metal Processing..	3	M.E. 184—Metal Processing, *or* M.E. 183—Materials Casting	3
Econ. 108—Elements of Economics	3	G.E. 112—Advanced Drafting for Mechanical Engineers[2]	2
Math. 143—Calculus[1]	5	Math. (new)[3]	3
Physics 107—Electricity and Magnetism, Modern Physics....	4	Physics 108—Heat, Sound, Light	4
T.A.M. 150—Analytical Mechanics (Statics)	2	T.A.M. 211—Analytical Mechanics (Dynamics)	3
Physical Education	1	Nontechnical Electives	2
		Physical Education	1
Total	18	*Total*	18

CURRICULUM IN METALLURGICAL ENGINEERING

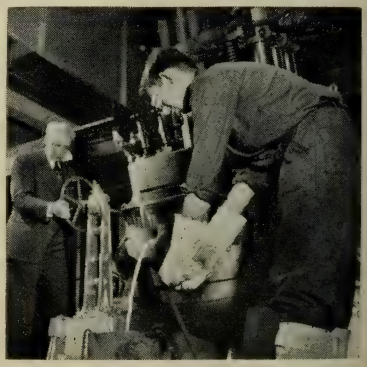
First Year

Common Program for Freshmen (page 42).

Second Year

FIRST SEMESTER	HOURS	SECOND SEMESTER	HOURS
Chem. 123—Quantitative Analysis	5	Met. E. 150—Introduction to Metallurgy	3
Math. 143—Calculus[1]	5	Physics 108—Heat, Sound, Light	4
Physics 107—Electricity and Magnetism, Modern Physics....	4	T.A.M. 154—Analytical Mechanics (Statics and Dynamics)	4
Nontechnical Electives	3	Nontechnical Electives	3
Physical Education	1	Physical Education	1
Total	18	*Total*	15

[1]Offered for first time September, 1954.
[2]Offered for first time February, 1955.
[3]This course will be available in the fall of 1953.



Metal pouring in the foundry

CURRICULUM IN MINING ENGINEERING

First Year

Common Program for Freshmen (page 42).

Second Year

FIRST SEMESTER	HOURS	SECOND SEMESTER	HOURS
Min. E. 151—Elements of Mining[1]	2	Min. E. 152—Fuels[1]	3
C.E. 115—General Surveying	3	Min. E. 154—Mine Surveying[1]	2
Math. 143—Calculus[2]	5	Econ. 108—Elements of Economics	3
Geol. 150—Geology for Engineers	3	Geol. 130—Mineralogy for Engineers[1]	3
Physics 107—Electricity and Magnetism, Modern Physics	4	Physics 108—Heat, Sound, Light	4
Physical Education	1	T.A.M. 150—Analytical Mechanics (Statics)	2
		Physical Education	1
Total	18	*Total*	18

SUMMER

First and Second Weeks

Min. E. 205—Summer Mine Surveying[1] ..... 2 hours

[1]Not offered at Chicago Undergraduate Division.
[2]Offered for first time September, 1954.

ARCHITECTURE AND ART

(Offered under the College of Engineering)

The curriculum in architecture is a five-year course and is offered with two optional programs. The work for the first year is identical. A field of specialization is selected in the second year.

The general option places the major emphasis on architectural design and includes a substantial program in architectural construction. While the esthetic is emphasized, basic preparation in liberal and scientific fields is required. The aim is to train the student for efficient service as a draftsman or designer in an architectural organization and to provide him with the necessary foundation for future independent practice.

The construction option (architectural engineering) offers a major study in building design, a thorough training in all forms of building construction, and emphasizes the structural and mechanical aspects of architecture. As the curriculum includes 3½ years of architectural design, free-hand drawing, and the history of architecture, the student who is primarily interested in construction can acquire a considerable knowledge of the artistic and utilitarian phases of planning. This option affords a

relatively wide range of elective courses in the social sciences, business, engineering, language and literature. It also provides sufficient training for independent practice as an architectural engineer.

In either option, the graduate who has acquired the necessary experience can apply for examination for State Professional Registration.

Excellent facilities in lecture, drafting rooms and studios are provided by the Department of Architecture and Art. The departmental Fine Arts Reading Room affords an outstanding collection of 6,000 volumes, 7,000 slides and innumerable pamphlets, clippings and graphic material.

Since the Chicago Undergraduate Division is located in Chicago, the department has numerous opportunities to present outstanding architects and professional lecturers as well as inspection trips to museums, galleries and various types of buildings under construction.

The practice courses in art are primarily for students in the architectural curriculum. Courses in the history and appreciation of art, drawing and sculpture are provided for students registered in other colleges of the University.

Class in architectural design

ELECTIVES

Electives provided in the two architectural curricula may consist of any courses given in the University and not required in the curricula, not paralleling the subject matter of required courses, and not open to freshmen. The following, which are open to freshmen, are also acceptable as electives: History 111, 112, 131; Botany 100, 101; Geography 101, 104, 105; Geology 101; Biology 101; Speech 101, 141; English 111, 112; Accountancy 101. Courses with prerequisites of sophomore standing: Rhetoric 152; Economics 108; English 131; Political Science 150, 151; Sociology 100.

FIVE-YEAR CURRICULUM IN ARCHITECTURE

Students entering as freshmen in September, 1949, and thereafter, follow the five-year curriculum in architecture and architectural engineering as outlined below.

First Year

FIRST SEMESTER	HOURS	SECOND SEMESTER	HOURS
G.E. 107—Architectural Projections	2	G.E. 108—Architectural Projections	2
Art 181—Freehand Drawing	2	Art 182—Freehand Drawing	2
Rhet. 101—Rhetoric and Composition	3	Rhet. 102—Rhetoric and Composition	3
Math. 117—Combined Freshman Mathematics	5	Math. 127—Combined Freshman Mathematics	4
Hygiene 101 or 104	2	Arch. 101—Introduction to Architecture	3
Physical Education	1	Physical Education	1
Total	15	*Total*	15

Second Year

FIRST SEMESTER	HOURS	SECOND SEMESTER	HOURS
Arch. 131—Architectural Design	3	Arch. 132—Architectural Design	3
Art 183—Freehand Drawing	2	Art 184—Freehand Drawing	2
Arch. 141—Materials and Methods of Construction I	2	Arch. 142—Materials and Methods of Construction II	2
Phys. 101—General Physics	5	Arch. 113—History of Ancient Architecture	2
Elective	3	T.A.M. 171—Elementary Mechanics	3
Physical Education	1	Elective	3
Total	16	Physical Education	1
		Total	16

FIVE-YEAR CURRICULUM IN ARCHITECTURAL ENGINEERING

First Year

Common Program for Freshmen (above).

Second Year

FIRST SEMESTER	HOURS	SECOND SEMESTER	HOURS
Arch. 131—Architectural Design	3	Arch. 132—Architectural Design	3
Art 183—Freehand Drawing	2	Art 184—Freehand Drawing	2
Arch. 141—Materials and Methods of Construction I	2	Arch. 142—Materials and Methods of Construction II	2
Phys. 101—General Physics	5	Arch. 113—History of Ancient Architecture	2
Math. 137—Calculus	3	Math. 147—Calculus	3
Physical Education	1	T.A.M. 150—Analytical Mechanics	2
Total	16	Physical Education	1
		Total	15

Harold W. Bailey, Associate Dean
Liberal Arts and Sciences

COLLEGE OF LIBERAL ARTS AND SCIENCES

The College of Liberal Arts and Sciences at the Chicago Undergraduate Division offers the first two years of work in the several professional, pre-professional, and general curricula offered in this college at the Urbana campus. In all these curricula, the first two years are devoted to general basic education with increasing specialization in the last two years. A student who is not certain of his vocation objective at the time of his admission to college has an opportunity to do considerable educational exploration in his first two years or commonly to change his vocational objective without additional time. Such a change after the beginning of the junior year usually cannot be made without loss of time.

It is assumed that upon completion of the two-years' work in the Chicago Undergraduate Division students will transfer to the Urbana campus to continue in their chosen field at the junior level. Students desiring to transfer to institutions other than the Urbana campus of the University of Illinois should familiarize themselves with the requirements of the school of their choice so that they may plan their work most effectively while at the Chicago Undergraduate Division.

The following Liberal Arts and Sciences curricula are offered at the Chicago Undergraduate Division: general, chemistry, chemical engineering, pre-medicine, pre-dentistry, pre-nursing, teacher-training, pre-law, pre-veterinary medicine, and pre-journalism. Content of the courses closely parallels that given on the Urbana campus of the University of Illinois.

General Curriculum

All students who do not elect to follow one of the specialized curricula described below enroll in the general curriculum. The general curriculum requires a number of basic courses in literature or philosophy, social studies and natural sciences, and a reading knowledge of at least one foreign language. Each student must select a major and a minor or a split minor in a field of concentration the last two years.

Because of the wide range of courses open to students in the general curriculum, it is not feasible to specify definite sequences of courses to be taken by any student in each of the four years of this curriculum. Under the guidance of an adviser, each student is expected to plan his own program within the general requirements outlined below. Students at the Chicago Undergraduate Division will find it to their advantage to complete the group requirements listed on pages 52 and 53 in their first four semesters in the University.

SUMMARY OF REQUIREMENTS FOR GRADUATION

Each candidate for the degree of A.B. or B.S. in the general curriculum of Liberal Arts and Sciences must meet the following requirements:

Hygiene—Hygiene 101 or 104.

Physical Education—4 semesters.

Rhetoric—Rhet. 101 and 102. (If C or D in Rhet. 102, student must pass qualifying examination or take Rhet. 200.)

Foreign Language—Equivalent of two college years in same language.

U. S. History—One unit of American History in high school or History 151 and 152.

Mathematics—One unit of Algebra and one unit of Plane Geometry in high school or Math. 101 and Math. 102.

Major—20 approved hours in one department.

Minor(s)—20 approved hours in one or two departments.

Advanced hours—30 hours of credit in courses not open to freshmen and sophomores.

Residence—Either first 88 hours uninterrupted, or last 30 hours uninterrupted at the University of Illinois. For students at the Chicago Undergraduate Division, the last 30 hours must be taken at Urbana.

Average—3.0 (C) minimum average.

Biological Sciences[1] .....8 hours.

Physical Sciences[1] .....8 hours.

Humanities[1] .....8 hours.

Social Sciences[1] .....8 hours.

Total hours—120 hours, excluding basic military and all physical education courses, with not more than one quarter of the work with a grade of D.

[1]The eight hours must be taken in approved sequence.

LIBRARY
UNIVERSITY OF ILLINOIS

Required Subjects

A. Foreign Language—A reading knowledge of a foreign language (French, German, Greek, Italian, Latin, Portuguese, Russian, or Spanish) equivalent to that resulting from four semesters of study of a foreign language commenced in college. To be begun in the first semester of the freshman year, except as otherwise provided, and to be continued until the requirement is completed. This requirement is satisfied by passing French 104, German 104 or 144, Greek 202, Italian 104, Latin 104 or 105, Portuguese 104, Russian 204, Spanish 104, or a more advanced course in any of these languages. Proficiency examinations are offered in French, German, and Spanish. Note: No credit toward graduation is given for a beginning course in a foreign language unless it is continued through a full year. Students planning to enter a graduate college are advised to obtain a reading knowledge of both French and German.

B. Group Requirements—To be begun in the freshman year and completed before the senior year. Students at the Chicago Undergraduate Division will find it to their advantage to complete these requirements by the end of their fourth semester. Proficiency examinations may be taken for credit in some of these subjects.

Students who entered college on or after September 1, 1946, are required to complete the following group requirements:

1. *Basic Knowledge*—From high school: one unit of American history or Hist. 151 and 152; one unit of algebra and one unit of plane geometry or Math. 101 and 102.

2. *General Education*—An approved two-semester course or sequence of courses in each of the following areas, with a minimum of eight hours credit in each: (a) humanities, (b) biological sciences, (c) physical sciences, (d) social sciences.

ELECTIVES

1. *Liberal Arts and Sciences*—Any course offered in the College of Liberal Arts and Sciences may be used as an elective.

2. *Other Colleges*—Electives totaling as much as but not more than 32 hours may be taken in other colleges and schools of the University and counted toward graduation from this college, in addition to the

courses acceptable for major and minor requirements, if such electives are in conformity with the following list approved by the faculty:

Accountancy—A total of 6 hours (including not more than one of the following courses: Accountancy 101, 102, 201).

Agricultural Economics—A total of 6 hours.

Architecture—A total of 15 hours.

Art—A total of 15 hours unless the student is majoring in history of art.

Business Law—A total of 6 hours.

Economics—All courses.

Education—A total of 20 hours.

Engineering—A total of 10 hours.

Food Technology—A total of 6 hours.

Forestry—A total of 3 hours.

Home Economics—All courses.

Horticulture—A total of 6 hours.

Hygiene—Hygiene 101 or 104 (2 hours).

Journalism—A total of 10 hours.

Landscape Architecture—A total of 7 hours.

Law—A student of senior standing with an average of 3.5 who has been in residence either the first two years or the last year of his pre-legal work may take and count toward the A.B. degree not to exceed 32 hours in the College of Law, provided that not less than two courses amounting to at least 5 hours a semester are taken with the advice of the Dean of the College of Law, and provided further that if any such student desires to take more than 6 hours of law work he must also register in the College of Law.

Library Science—A total of 10 hours.

Management and Marketing—A total of 6 hours. Typewriting, secretarial training, and shorthand may not be counted for credit.

Military Training—A total of 8 hours in advance courses.

Music—A total of 15 hours approved by the Director of the School, unless the student is majoring in music.

Physics—All courses.

CHEMISTRY AND CHEMICAL ENGINEERING

The minimum language requirement for graduation in the following curricula in chemistry and chemical engineering is the equivalent of two years of college work in German or French. When a student does not offer either German or French for entrance, the second year of the language required for graduation may be counted as an elective in either curriculum.

Students who enter with inadequate preparation in chemistry, mathematics, and foreign languages in high school will find it difficult to complete their professional training in chemical engineering in four years. The optional five-year curriculum is recommended especially for those who do not qualify for Chemistry 107 and Mathematics 117, and who do not have two units of high school credit in French or German. Students should note that they must have a 3.5 general average for registration in these curricula after they have attained junior standing.

CURRICULUM IN CHEMISTRY

First Year

FIRST SEMESTER	HOURS
Chem. 107—General Chemistry and Qualitative Analysis[1]	5
Math. 117—Freshman Mathematics[2]	5
German or French	4
Rhet. 101—Rhetoric and Composition	3
Physical Education	....
Total	17

SECOND SEMESTER	HOURS
Chem. 108—General Chemistry and Qualitative Analysis	5
Math. 127—Freshman Mathematics[2]	4
German or French	4
Rhet. 102—Rhetoric and Composition	3
Hygiene 101 or 104	2
Physical Education	....
Total	18

Second Year

FIRST SEMESTER	HOURS
Chem. 124—Quantitative Analysis	5
Math. 137—Calculus	3
Phys. 103—General Physics	5
Physical Education	....
Electives[3]	3
Total	16

SECOND SEMESTER	HOURS
Chem. 234—Organic Chemistry[4]	5
Math. 147—Calculus	3
Phys. 104—General Physics	5
Physical Education	....
Electives[3]	2-5
Total	15-18

FOUR-YEAR CURRICULUM IN CHEMICAL ENGINEERING

First Year

FIRST SEMESTER	HOURS
Chem. 107—General Chemistry and Qualitative Analysis[5]	5
G.E. 106—Elements of Drawing	3
Hygiene 101 or 104	2
Math. 122—Analytic Geometry[6]	4
Rhet. 101—Rhetoric and Composition	3
Physical Education	....
Total	17

SECOND SEMESTER	HOURS
Chem. 108—General Chemistry and Qualitative Analysis[5]	5
Math. 132—Calculus[6]	5
Physics 106—Mechanics	4
Rhet. 102—Rhetoric and Composition	3
Physical Education	....
Total	17

[1]All students with entrance credit in chemistry are required to take a proficiency examination before registering for Chem. 107. Those who do not show the necessary proficiency will be placed in Chem. 101 or 102, after which they will take Chem. 106 and 110. For students without entrance credit in chemistry, the required sequence is Chem. 101, 106, and 110.

[2]For students who do not take Math. 117-127, the required sequence is Math. 112 (or 111), 114 (or 115), 122, 132, and 142.

[3]Suggested courses for electives are: Zool. 101, 107, 132; Biology 101, 111, 121, 131, 132; Bot. 100, 101; Engl. 121, 122; Geol. 130, 150; Hist. 151, 152; Bact. 104, 105; German or French. Of the total electives for graduation, at least 12 hours should be from advanced courses in chemistry and at least 10 hours from courses offered by other departments.

[4]Not given at Chicago Undergraduate Division. Chem. 133 may be substituted under certain conditions. Consult the Division of Physical Sciences.

[5]Students without entrance credit in chemistry take the sequence Chem. 101, 106, 110, 124, etc.

[6]Students without the required entrance credits in mathematics take Math. 112 (or 111), 114 (or 115), 122, 132, and 142.

Experiments in chemistry

Second Year

FIRST SEMESTER	HOURS
Chem. 124—Quantitative Analysis	5
German or French[1]	4
Physics 107—Electricity, Magnetism, Modern Physics	4
Physical Education	....
Total	16

SECOND SEMESTER	HOURS
Chem. 240—Elementary Physical Chemistry[2]	5
Chem. 241—Elementary Physical Chemistry Laboratory[4]	1
German or French[1]	4
Physics 108—Heat, Sound, Light	4
T.A.M. 150—Analytical Mechanics (Statics)	2
Physical Education	....
Electives[3]	3
Total	17

[1]Two years of French and/or German are required for the B.S. degree. Two units of high school credit in either of these languages is equivalent to one year of college credit. Students entering without German or French in high school may substitute the second year of the language requirement for the six hours of electives referred to in footnote 5.

[2]Not given at Chicago Undergraduate Division.

[3]Six hours of electives must be chosen from the Divisions of Humanities or Social Sciences with the approval of the adviser. The courses are intended to broaden the engineer and provide an interest and liberal education in history, language, literature, philosophy, political science, or public speaking.

OPTIONAL FIVE-YEAR CURRICULUM IN CHEMICAL ENGINEERING

First Year

FIRST SEMESTER	HOURS
Chem. 101 or 102—General Chemistry[1]	5 or 3
Math. 117—Freshman Mathematics[2]	5
Rhet. 101—Rhetoric and Composition	3
German or French	4
Physical Education	....
Total	15-17

SECOND SEMESTER	HOURS
Chem. 106—Inorganic Chemistry	5
Math. 127—Freshman Mathematics[2]	4
German or French	4
Rhet. 102—Rhetoric and Composition	3
Hygiene 101 or 104	2
Physical Education	....
Total	18

Second Year

FIRST SEMESTER	HOURS
Chem. 110—Qualitative Analysis	5
Math. 137—Calculus	3
German or French	4
Phys. 106—Mechanics	5
Physical Education	....
Total	17

SECOND SEMESTER	HOURS
Chem. 124—Quantitative Analysis	5
Math. 147—Calculus	3
Phys. 107—Electricity, Magnetism, Modern Physics	5
German or French	4
Physical Education	....
Total	17

PRE-MEDICAL CURRICULUM

Any freshman whose scholarship rank is in the upper half of his high school graduating class, on matriculating in the College of Liberal Arts and Sciences, is eligible for admission to the pre-medical curriculum.

Pre-medical students must maintain a 3.5 average during the first two semesters in the curriculum. By the end of the third semester the average for the three semesters must be raised to 3.75 and this average must be maintained. Students who fail to meet these minimum requirements will be transferred to the general curriculum.

A student transferring to this college with advanced standing must meet the scholastic requirements at the level at which he transfers, in terms of the University's grading system, in order to be admitted to the pre-medical curriculum.

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[1]Students who qualify for Chem. 107 should take the Chem. 107, 108, 124, 240 sequence rather than Chem. 101, 106, 110, 124 and thus have five additional hours of advanced electives.

[2]For students who do not take Math. 117-127, the required sequence is Math. 112 (or 111), 114 (or 115), 122, 132, and 142.

A student who enters the College of Medicine at the University of Illinois, having completed the junior year at Urbana and having met the language requirements and the appropriate group requirements in Group B, on page 52, may receive the degree of Bachelor of Science from the College of Liberal Arts and Sciences on completion of the first year of medicine. No student may receive credit toward this degree for more than one year of work done in any other college or university.

Other factors being equal, students at the University of Illinois who have completed the pre-medical curriculum with an average of 4.3 or better, will be given preferential consideration by the Committee on Admissions, provided that at least the second and third years have been done within the University.

The specific requirements for admission to the College of Medicine at the University of Illinois are as follows:

	Semester Hours
Chemistry (including, in addition to introductory courses, four hours of organic chemistry, three hours of quantitative analysis, and three hours of physical chemistry—Chem. 101 or 102, 105, 122, 133, and 247)	16
Physics (including laboratory work in mechanics, heat, sound, light, and electricity—Phys. 101 and 102)	8
Biology (including general[1] and vertebrate zoology and general embryology	10
Rhetoric and Composition (Rhet. 101 and 102)	6
Modern Language (French, German, or Spanish, etc.)	6
Social Sciences Electives (including courses from at least two of the following fields; anthropology, economics, history, philosophy, political science, psychology, and sociology)	14
Electives	28
Total	88

PRE-DENTAL CURRICULUM

Students applying for admission to the pre-dental curriculum must have ranked in the upper half of their high school graduating class. They must maintain at all times in the curriculum a minimum average of 3.5. The work covered by the first two years of the pre-medical curriculum enables students to meet the requirements for admission to the University of Illinois College of Dentistry. Since the function of the pre-dental years is to supply a general background for the student as well as specific training in the fundamental concepts of the sciences, it is recommended that the elective hours also include history, economics, sociology, philosophy, and at least one modern language.

[1]The general zoology requirement may be met by Biology 101 and 131, or Biology 101 with a grade of "B."

The specific requirements for admission to the College of Dentistry are as follows:

	Semester Hours
Chemistry (including three hours of quantitative analysis and four hours of organic chemistry—Chem. 101 or 102, 105, 122, and 123)	12
Physics (Phys. 101 and 102)	6
Biology (including general zoology[1])	6
Rhetoric and Composition (Rhet. 101 and 102)	6
Electives (including history, economics, sociology, philosophy and at least one modern language; excluding military, hygiene, and physical education)	30
Total	60

Pre-dental students who wish to be candidates for the degree of Bachelor of Science in Dentistry on the completion of the second year in the College of Dentistry should consult the College Catalog.

PRE-NURSING CURRICULUM

The University of Illinois offers a program leading to a Bachelor of Science degree in Nursing with the University of Illinois—Cook County School of Nursing and in affiliation with Michael Reese, Presbyterian, and St. Luke's Schools of Nursing. The degree program is in two parts, a two-year pre-professional course and a 30 to 36-month professional program. Following the completion of the 60 semester hours of prescribed college work outlined below, students must enroll for professional education and clinical experience in nursing in one of the affiliated schools of nursing.

Students entering the pre-nursing curriculum must meet the requirements for admission to the general curriculum of the College of Liberal Arts

[1]The general zoology requirement may be met by Biology 101 and 131, or Biology 101 with a grade of "B."

The unseen world—microbiology

and Sciences, and, in addition, present credit in one year of elementary algebra and one year of plane geometry. Admission to the curriculum is restricted to students 16 to 28 years old. Students 28 to 33 years old may enter subject to approval of the nursing advisory committee. The specific requirements of the pre-nursing curriculum are as follows:

	Semester Hours
Rhetoric and Composition	6
Social Sciences (including the equivalent of a course in sociology and a course in psychology)	12
Humanities	6
Chemistry (one year of general and one semester of organic chemistry)	10
Biological Sciences (including a course in bacteriology)	8
Physics (a course specially designed for nurses or a year of college physics)	4
Electives (one year of foreign language recommended)	14
Physical Education (four semesters)	....
Total	60

Special advisers will confer with students enrolling in the pre-nursing curriculum before each student first registers.

CONTINUATION PROGRAM IN NURSING

This program leads to the degree of Bachelor of Science in Nursing, which is conferred by the School of Nursing. It is open to holders of the Diploma in Nursing conferred by one of the affiliated hospital schools: Michael Reese, Presbyterian, St. Luke's, Cook County, all of Chicago. The program consists of four semesters, plus one summer session or half-semester of eight weeks. The first two semesters are in the College of Liberal Arts and Sciences, either in Urbana or at the Chicago Undergraduate Division, the third semester in the College of Liberal Arts and Sciences in Urbana, the remainder in the University of Illinois School of Nursing, with residence as indicated.

REQUIREMENTS FOR ADMISSION

Candidates shall apply to the College of Liberal Arts and Sciences for admission to the program, which will be granted upon fulfillment of the following conditions.

1. Certification by the University of Illinois School of Nursing that the candidate holds the Diploma in Nursing from one of the affiliated schools,

there received grades averaging 3.5 in theory and practice, and is recommended by the affiliated school.

2. Satisfaction of the requirements for admission to the general curriculum in the College of Liberal Arts and Sciences.

3. Certification by the University of Illinois School of Nursing that the candidate has achieved on the Graduate Nurse Test Battery of the National League of Nursing Education a score not lower than 1½ s.d. below the mean of collegiate norms for each of the clinical fields. This certification shall entitle the candidate to a block credit of forty semester hours in Clinical Nursing.

4. Certification by the University of Illinois School of Nursing that the candidate has passed examinations (as set by the National League of Nursing Education) for advanced standing in Microbiology (four semester hours) and Anatomy and Physiology (five semester hours).

5. Passing of examinations for advanced standing in Rhetoric and Composition (six semester hours), and General Chemistry (five semester hours), administered by the appropriate departments of the College of Liberal Arts and Sciences.

6. Failure to demonstrate proficiency in any or all of the fields listed under paragraphs 4 and 5 shall not preclude admission to the Continuation Program, but shall require adding to the candidate's program appropriate courses in the subjects indicated. Courses taken for making up such deficiencies shall not in any case count as electives within the sixty semester hours of the Continuation Program.

REQUIREMENTS FOR GRADUATION

Each candidate for the degree must earn 120 semester hours, including thirty hours of advanced work done in residence. Sixty of these hours shall be those specified in paragraphs 3, 4, and 5 under Admission, above. The remaining sixty hours, constituting the Continuation Program proper, must be passed with an over-all average of 3.0, and shall be made up as follows, subject to such rearrangement of courses or lengthening of the period of study as may be required because of entrance deficiencies, which should be removed within the first year.

Second Year

FIRST SEMESTER (URBANA)

	Hours
Social Sciences	6 or 9
For students electing Community Nursing:	
Psych. 216—Child Psychology	3
Sociol. 220—Marriage and the Family	3
Sociol. 276—Sociology of the City, or Sociol. 277—Rural Sociology	3
For students electing Institutional Nursing:	
Psych. 250—Psychology of Personality	3
Psych. 255—Social Psychology, or Psych. 338—Abnormal Psychology, or Sociol. 212—Culture Patterns and the Individual	3
Phil. 105—Moral Ideas and Practice	2
Ed. 211—Educational Psychology	3
Electives (other courses in social sciences, or courses in the biological sciences, or other courses with permission of the Director of the School of Nursing, to total at least 15 hours)	

Second Year

SECOND SEMESTER (URBANA OR CHICAGO)

Students transfer to the University of Illinois School of Nursing as candidates for the degree of Bachelor of Science in Nursing. Courses in this group will be offered alternately at the Chicago Professional Colleges and on the Urbana campus, if registration warrants.

Nursing 301—Introduction to Community Nursing (for students electing Community Nursing), or Nursing 300—Introduction to Management in Nursing (for students electing Institutional Nursing)	3
Nursing 200—Principles of Health Teaching	2
Nursing 302—Seminar in Trends and Problems in Nursing Services	3
Electives (as required to bring total credit hours to 116 in this semester; minimum, 3 hours)	

Summer Session or Half Semester

Nursing 311—Field Practice in Community Nursing (for students electing Community Nursing), or Nursing 310—Field Practice in Management Nursing (for students electing Institutional Nursing)	4

PRE-VETERINARY CURRICULUM

The two-year pre-veterinary curriculum in the College of Liberal Arts and Sciences is followed by the four-year curriculum in the College of Veterinary Medicine in Urbana. Students applying for admission to the pre-veterinary curriculum must rank in the upper half of their high school graduating class. Students transferring with advanced standing must have maintained at least a 3.5 average in terms of the University's grading system. Students must maintain at least a 3.5 average to remain in the curriculum.

The specific requirements for admission to the College of Veterinary Medicine at Urbana are as follows:

	Semester Hours
Chemistry (including organic and quantitative analysis—Chem. 101, or 102, 105, 122, and 133)	16
Biological Sciences[1] (including botany and general zoology)	8
Physics (including laboratory—Phys. 101 and 102)	8
Foreign Language	6
Rhetoric and Composition (Rhet. 101 and 102)	6
Electives in not less than two of the following fields: economics, fine arts, language, geography, history, literature, philosophy, political science, psychology, sociology, speech. Approximately one-half of these credits should be in social sciences	9
Free electives	7
Total	60

The pre-veterinary curriculum is extremely rigid and failure to register in the prescribed courses in the proper sequence may result in additional time.

PRE-LAW CURRICULUM

The pre-legal courses constitute a highly important phase of the education of students planning the study of law, and this work should be planned with care. Students contemplating the study of law are advised to consult with the Student Counseling Bureau at the Chicago Undergraduate Division relative to their interests and aptitudes for law.

Students taking the curriculum leading toward degrees in both liberal arts and law comply with the graduation requirements in the general curriculum. Such students are urged to complete all of these requirements before entering the College of Law except the minor and advanced hours. The prospective law student is advised to choose his work, beyond those subjects prescribed in liberal arts, from among the following fields: English, with special emphasis on rhetoric and speech; political science; history, with emphasis on American and English constitutional history; economics; philosophy, and particularly logic; Latin; psychology; sociology; mathematics; and accountancy.

HOME ECONOMICS

Students planning to major in home economics may profitably attend the Chicago Undergraduate Division for one year. Courses for the freshman program in home economics should be chosen only after consultation with the Dean of the College of Liberal Arts and Sciences.

[1]The biological sciences requirement may be met by Biology 101 and 131.

TEACHER-TRAINING CURRICULA

Of the curricula in teacher-training which have been approved by the College of Liberal Arts and Sciences, preliminary work in twelve curricula is offered at the Chicago Undergraduate Division as follows: biology, chemistry, English, French, geography, German, mathematics, mathematics and physical sciences, physics, social studies, Spanish, speech, and speech correction. In order to meet graduation and state certification requirements, these curricula are relatively rigid and failure to take the prescribed courses of the first two years within that time may result in an additional semester of undergraduate work.

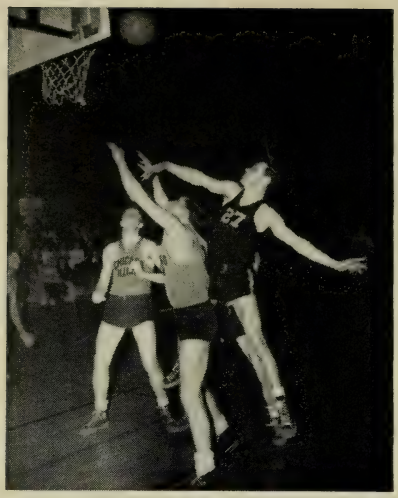
The first two years of elementary education curriculum, which is designed to meet the requirements for teaching in the elementary and kindergarten-primary grades of Illinois schools, are also administered by this college.

PRE-JOURNALISM CURRICULUM

Students planning to enter the School of Journalism and Communications register as pre-journalism freshmen and sophomores following the general curriculum in the College of Liberal Arts and Sciences. Courses in English literature and rhetoric, foreign languages, physical sciences, and social studies are recommended as desirable preparation for the profession of journalism. The ability to use a typewriter should be acquired before entering this school.

For admission to the School of Journalism and Communications as a candidate for a degree, a student must have completed 56 semester hours of work in one of the undergraduate curricula, exclusive of required courses in physical education and military science, with an average grade of 3.5 (one-half of the college work with an average grade of "B" and one-half with an average grade of "C"). An applicant for admission will find it to his advantage to include in his pre-journalism curriculum at least six hours of rhetoric and composition, twelve hours of history, political science, economics, and sociology, and ten hours of science, including mathematics.

The School of Journalism and Communications offers the following curricula: editorial, advertising, publication management, and radio.



Basketball

PHYSICAL EDUCATION

All students entering the University as freshmen are required to obtain four hours of credit in physical education. Each student is given a health examination and a motor fitness test before registration. The findings by the Health Service and the testing division are used as a basis for prescribing each student's immediate physical education program. Students with handicapping physical defects are assigned to special courses such as adapted sports and prescribed activities. Students with low scores in motor fitness are assigned to basic physical fitness courses.

Students who are organically sound and demonstrate a fair degree of motor fitness are permitted to elect from a variety of activity courses. All general courses in physical education meet three times a week for one hour or two times a week for 1½ hours. All general courses in physical education carry one hour of credit.

Women students entering the University as freshmen are required to obtain credit for four semester hours of work in physical education; those entering the University with sophomore standing are required to obtain credit for two semesters of work in physical education. Women are offered instruction in elementary, intermediate, and advanced rhythms, individual gymnastics, basketball, volleyball, softball, badminton, tumbling, apparatus stunts, fundamentals of motor fitness, archery, games for school and playground, folk and square dance, boating and fishing, swimming, golf, and bowling. Women's physical education classes are held in the Auditorium at the east end of the Pier. Through the Women's Athletic Association and Orchesis, the modern dance group, women students are offered wide opportunities for extracurricular activities in sports and the dance.

Men students entering the University with less than 56 semester hours credit are required to secure four semesters of credit in physical education, including the amount transferred. In addition to intercollegiate and intramural athletics, men students in the physical education classes are offered instruction in volleyball, badminton, swimming, individual tumbling, double tumbling, apparatus stunts, boxing, wrestling, weight lifting, archery, boating and fishing, personal defense activities, and a basic physical fitness program.

Veteran students who have fulfilled the four-hour physical education requirement while in the service are exempted from taking physical education. Veterans are encouraged to utilize the physical education facilities, but additional credit will not be granted except as elective credit in the College of Commerce.

In addition to the service program, the Physical Education Department offers the first two years of the professional training curricula leading to the degrees of Bachelor of Science in Physical Education, in Health Education, and in Recreation. Complete information concerning the professional training curricula is available at the office of the Director of Physical Education.

ARMY RESERVE OFFICERS' TRAINING CORPS

Authorization

The Reserve Officers' Training Corps (ROTC) is organized under authority of the Act of Congress of June 3, 1916, and was activated at the University of Illinois, Chicago Undergraduate Division, in September, 1950.

Educational Aim

The fundamental educational aim of the ROTC is to make the student conscious of his duties and responsibilities to his government as a citizen of this nation and, to so prepare him, that in time of national emergency he can fulfill his responsibility in accordance with his training and capabilities.

The broad aspect of the military training program gives the student a training which is as valuable to him in his civilian career as it is in his service to his country in time of emergency. The program offers a wide variety of work that is fundamental in nature. It should instill in the student an indelible impression of the place of the armed forces in the American democracy, and of the extent to which our military organization is dependent on the productive capacity of the nation.

Physical Training

A military unit is largely dependent for its efficiency upon the physical fitness of the individuals composing it. Therefore, it is the policy to encourage and support the physical training given by civilian instructors.

Participation

The ROTC Course is offered to qualified male students on a volunteer basis. Qualifications for enrollment in the ROTC are that the student be:

1. Regularly enrolled in the University.
2. A citizen of the United States.
3. Within specified age limits.
4. Physically qualified.
5. Approved by the Professor of Military Science and Tactics.

Program of Instruction

College level ROTC instruction is divided into two parts: the basic course, which comprises the first two years of the program, and the advanced course, comprising the last two years of the program. Only the first three years of this program are offered at the Chicago Undergraduate Division.

Basic Course

The first two years of military training are designated as the Basic Course. Students in the basic course will devote three hours a week to military instruction which will consist of two hours of class room instruction and one hour of drill. Accreditation for the Basic Course is one hour per semester. A student entering the University of Illinois from a high school or preparatory school which has an accredited Junior Division ROTC program may be granted advance standing in the Basic Course not to exceed one-third of the number of terms or semesters of the Junior Division ROTC successfully completed. A Department of Defense Form No. 68, prepared by the Professor of Military Science and Tactics of the institution previously attended, must be submitted to the Military Science Department prior to registration or must be in the hands of the student concerned at the time of registration. Students intending to enroll in the Basic Course must not have reached the age of twenty-three at the time of enrollment.

Advanced Course

The Advanced Course of the ROTC leads to a Reserve or Regular commission in the Army. The first year of Advanced Course training in Infantry, Artillery, and Engineers is offered to students who have successfully completed the two-year Basic Course or to veterans of the Army, Air Force, Navy and Marine Corps who have completed one year of

active service in the Armed Forces and have been honorably discharged. Students enrolling initially in the Advanced Course must not have reached their twenty-seventh birthday at the time of enrollment. Any student desiring entrance into the Advanced Course must be prepared to complete the course. The objective of the Advanced Course is to produce college-trained junior officers to meet the needs of the Army Reserve, National Guard, and Regular units.

The Advanced Course consists of five hours of instruction per week, four of which will be classroom instruction and one hour of drill. Accreditation for the Advanced Course is three credit hours per semester. All candidates for a Reserve commission must have reached an age of not less than twenty-one years, completed four years of education at college or university level, and successfully completed the Advanced Course which includes a summer encampment. The encampment is of approximately six weeks duration and is usually held at the end of the first year of the Advanced Course. Students completing all requirements for a Reserve commission but who have not reached the age of twenty-one will be given a certificate of capacity and a temporary commission and will receive the Reserve Officer Commission shortly after their twenty-first birthday. Those with distinguished records in ROTC are selected for consideration for Regular commission in the Army.

All members of the Advanced Course will receive the following:

1. Monetary allowance in lieu of subsistence.
2. Officer-type uniform.
3. The pay of the seventh enlisted grade while at the advanced summer encampment.
4. All necessary texts and materials on a loan basis.

Deferment

Deferment from Selective Service is granted for completion of the four-year course to those students who are qualified and approved by a deferment board composed of military and civilian faculty personnel. Deferred students will retain their deferment throughout their course in military, provided they maintain the required standards.

Clothing and Equipment

All students enrolled in the ROTC, including the Basic Course, receive an Army officer-type uniform, text books, notebooks, paper and pencils at Government expense. Equipment and supplies are provided on a loan basis and must be returned at the close of the school year. A deposit of $10.00 is required prior to the issue of equipment. This deposit, through the Military Property Custodian, is refundable at the close of the school year.

COURSES OF INSTRUCTION

Accountancy

101. PRINCIPLES OF ACCOUNTING. Simple transactions, general ledger accounts, books of original entry, closing process, trial balances, financial statements, accounting for negotiable instruments, controlling accounts, adjusting entries. Students who present one unit of bookkeeping for entrance should register in Accountancy 102. They will not be allowed full credit in Accy. 101 unless high school bookkeeping credit can be dropped. I, II; 3. Students with 95 or more credit hours receive only 2 hours credit.

102. PRINCIPLES OF ACCOUNTING. Similar to Accountancy 101. For those who present one unit of entrance credit in bookkeeping. Students who have failed in Accountancy 101 are permitted to register in Accountancy 102 and receive credit as in Accountancy 101 if their final grade is "C" or above. I, II; 2. Students with 95 or more credit hours receive only 1 hour credit.

105. ACCOUNTING PROCEDURE. Relation of business documents to the accounts; fundamentals of partnership and corporation accounting; business forms and records; financial statement analysis. I, II, 3. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: Accountancy 101 or 102.

106. ELEMENTARY COST ACCOUNTING. Accounting for production management. Principles and methods of accounting for managerial control of costs of production. I. II; 3. Prerequisite: One year of accountancy; sophomore standing; credit or registration in Economics 102 or 108.

108. INTERMEDIATE ACCOUNTING. Consideration at the intermediate level of accounts and transactions peculiar to the partnership and corporation types of organization; interpretation of financial statements and analysis of the principal accounts represented therein. I, II; 3. Prerequisite: Credit or registration in Accountancy 106.

Architecture

101. INTRODUCTION TO ARCHITECTURE. Introduction to the building industry and the profession of architecture, exercises illustrating basic architectural forms and their organization. I, II; 3.

113. HISTORY OF ANCIENT ARCHITECTURE. A description and analysis of the development of the architecture of the ancient East, Greece, and Rome, related to the environmental and cultural setting. I, II; 2. Prerequisite: Architecture 131, or sophomore standing.

131. ARCHITECTURAL DESIGN. Beginning study of architectural planning and designing. Fundamentals of sketching and presentation. I, II; 3. Prerequisite: Architecture 101 and registration in General Engineering 108.

132. ARCHITECTURAL DESIGN. Continuation of the fundamentals of architectural design. I, II; 3. Prerequisite: Architecture 131, or consent of instructor.

133. ARCHITECTURAL DESIGN. Continued study of architectural planning and designing; principles of plan, elevation, and section in small buildings. I, II; 3. Prerequisite: Architecture 132.

141. MATERIALS AND METHODS OF CONSTRUCTION I. Wood frame construction as used in houses; manufacture and performance characteristics of materials; framing systems; typical details; finishing materials. I, II; 2. Prerequisite: Registration in Architecture 131.

142. MATERIALS AND METHODS OF CONSTRUCTION II. Non-fire resistance construction; manufacture and performance characteristics of materials; support systems; typical details; finishing materials. Lectures, drawings. I, II; 2. Prerequisite: Architecture 141.

Art

111. INTRODUCTION TO ANCIENT AND MEDIEVAL ART. Cultural analysis of the inter-related fields of architecture, sculpture, painting, and other humanistic studies previous to the Italian Renaissance. I, II; 3.

112. INTRODUCTION TO RENAISSANCE AND MODERN ART. Cultural analysis of the inter-related fields of architecture, sculpture, painting, and other humanistic studies beginning with the Italian Renaissance and continuing through the modern period. I, II; 3.
115. ART APPRECIATION. An introduction to the factors inherent in architecture, sculpture, painting, and other arts. Primarily for non-art students. I, II; 3.
181. FREEHAND DRAWING. Simple groups of block form, still life, and casts in pencil and charcoal. Primarily for students in architecture and landscape architecture I, II; 2.
182. FREEHAND DRAWING. Simple groups of block form, still life, and casts in pencil and charcoal. Primarily for students in architecture and landscape architecture. I, II; 2. Prerequisite: Art 181.
183. FREEHAND DRAWING. Charcoal drawing from the cast; water color. Primarily for students in architecture and landscape architecture. I, II; 2. Prerequisite: Art 182.
184. FREEHAND DRAWING. Charcoal drawing from the cast; water color. Primarily for students in architecture and landscape achitecture. I, II; 2. Prerequisite: Art 183.

Biological Sciences

101. FUNDAMENTALS OF BIOLOGY. This course is designed to give a fundamental understanding of plant and animal life and their reproduction. It is not a survey of the plant and animal kindoms, but is rather a scientific examination of the manner and means whereby plants and animals live and reproduce their kind. Lectures, laboratory, and quiz. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit.
111. GENERAL BOTANY. A survey of the plant kingdom. The morphology and physiology of representative plants from Thallophytes through Angiosperms are considered in building up a system of natural classification based upon phylogenetic relationships. The importance of plants in the system of nature and human economics is emphasized. Lectures, laboratory, and quiz. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Biology 101.
115. INTRODUCTORY SYSTEMATIC BOTANY (PLANT TAXONOMY). Classification and identification of flowering plants, with special reference to the local flora, and the needs of high school teachers. Occasional field trips required. Lectures, laboratory, and quiz. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Biology 101 and 111.
116. ECONOMIC BOTANY. Lectures and demonstrations of the uses of plants and plant products by man. The origin and distribution of native and cultivated plants and their relation to human history. Forest, drug, food, textile, beverage, and other industrial institutions. Lectures and discussion. II; 3. Prerequisite: Biology 101 and 111.
121. MICROBIOLOGY. A study of microorganisms and their role in the system of nature. Among the microorganisms are included the viruses and the microscopic multicellular plants and animals, as well as the protozoa and bacteria. Primary emphasis will be placed upon the bacteria. The systematic evolutionary, physiological, and ecological relationships of these organisms with both plant and animal worlds will be considered. Lectures, laboratory and quiz. I, II; 4. Prerequisite: Biology 101.
126. ADVANCED GENERAL BACTERIOLOGY. General technic, special apparatus, and methods. Lectures, laboratory, and quiz. II; 4. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Biology 101 and 121; credit or registration in Chemistry 105.
131. GENERAL ZOOLOGY. A survey of the animal kingdom, the phylogenetic relationships of animals and classification. Emphasis is placed upon economically important and parasitic forms. Lectures, laboratory, and quiz. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Biology 101.

132. COMPARATIVE VERTEBRATE ANATOMY. Classification and distribution of the vertebrate animals. Comparative anatomy of organs and organ systems, their function and evolution. Lectures, laboratory, and quiz. I, II; 5. Prerequisite: Biology 101 and 131, or Biology 101 with a grade of "B".
136. BIRD STUDY. Native birds; their identification, food relations, seasonal distribution, migration activities, economic importance, and conservation. II; 2.
141. VERTEBRATE PHYSIOLOGY. This course is designed to furnish an understanding of the basic physiological activities of the vertebrate organism. Lectures, laboratory, and quiz. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Biology 101.
142. PHYSIOLOGY OF THE NERVOUS SYSTEM. This course is planned to give an understanding of the physiological activities by which the nervous system carries out its function. Recommended as background for students of psychology, education, or biological sciences. Lectures, laboratory, and quiz. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Biology 101 and 141.
333. VERTEBRATE EMBRYOLOGY. The development of the vertebrate body and its organs. Lectures, laboratory, and quiz. I, II; 5. Prerequisite: Biology 101 and 132; junior standing.

Business Law

100. BASIC PRINCIPLES OF BUSINESS LAW. Basic principles in business law, covering the subjects of contracts, sales, negotiable instruments, and agency. Credit toward graduation will not be given for Business Law 201 or 261 in addition to Business Law 100. I, II; 3. Prerequisite: Accountancy 105; Economics 102; forty-five credit hours.

Chemistry

101. GENERAL CHEMISTRY. For students who have no entrance credit in high school chemistry, or whose preparation is inadequate for Chemistry 102. I, II; 5. Students with 95 or more credit hours receive only 3 hours credit. Students who have received entrance credit for high school chemistry are given only 3 hours credit for Chemistry 101. Prerequisite: One unit of entrance credit in physics, or 2½ units of entrance credit in mathematics, or credit in Mathematics 111 or 112.
102. GENERAL CHEMISTRY. For students who have one year of high school chemistry. I, II; 3. Students with 95 or more credit hours receive only 2 hours credit. Students who have not used their high school chemistry for entrance may receive 5 hours credit for Chemistry 102 if they complete the course with a grade of "C" or higher. Prerequisite: One unit of entrance credit in chemistry or equivalent.
103. GENERAL CHEMISTRY. Lectures, recitations, and laboratory. For engineering students who have had no chemistry. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. Students who have received entrance credit for high school chemistry are given only 3 hours credit in Chemistry 103. Prerequisite: One unit of entrance credit in physics, or 2½ units of entrance credit in mathematics, or credit in Mathematics 111 or 112.
104. CHEMISTRY OF THE METALLIC ELEMENTS. Lectures, recitations, and laboratory. Limited to students in the engineering curricula. I, II; 4. Credit in Chemistry 104 will not be granted to students who have received credit in Chemistry 105 or 106. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Chemistry 101, 102, or 103.
105. INORGANIC CHEMISTRY AND QUALITATIVE ANALYSIS. Lectures, recitations, and laboratory. For students in the ceramic engineering curriculum and for students who are not eligible for Chemistry 104 or 106. I, II; 5. Credit in Chemistry 105 will not be granted to students who have received credit in Chemistry 104 or 106. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Chemistry 101, 102, or 103.

106. INORGANIC CHEMISTRY. Metallic elements. For students in the chemistry curriculum, and for chemistry majors who are not pre-medical students. I, II; 5. Credit in Chemistry 106 will not be granted to students who have received credit in Chemistry 104 or 105. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Chemistry 101, 102, or 103.
107. GENERAL CHEMISTRY AND QUALITATIVE ANALYSIS. For students in the curriculum of chemistry or chemical engineering. Lectures, recitations, and laboratory. I; 5. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Excellent high school background in chemistry as shown by a placement examination.
108. GENERAL CHEMISTRY AND QUALITATIVE ANALYSIS. For students in the curriculum of chemistry or chemical engineering. Lectures, recitations, and laboratory. II; 5. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Chemistry 107.
110. QUALITATIVE ANALYSIS. Qualitative analysis of metals and inorganic compounds. Open to all students; required of students whose major is chemistry or chemical engineering and those registered in the curriculum of chemistry except students who qualify for Chemistry 107 and 108. I, II; 5. Prerequisite: Chemistry 106.
122. ELEMENTARY QUANTITATIVE ANALYSIS. Gavimetric and volumetric analysis, stoichiometrical relations, practical applications. I, II; 5. Prerequisite: Chemistry 104, 105, or 106.
124. QUANTITATIVE ANALYSIS. For all students in the Chemistry curriculum and Chemical Engineering. I, II; 5. Prerequisite: Chemistry 110 or satisfactory record in Chemistry 107 and 108.
133. ELEMENTARY ORGANIC CHEMISTRY. To fulfill the requirements for pre-medical, pre-dental, pre-veterinary, dietetics, and home economics students. Lectures, recitations, and laboratory. I, II; 5. Prerequisite: Chemistry 105 or 110.
196. GENERAL CHEMISTRY. Designed to give a cultural background with particular emphasis upon recent developments in several fields of chemistry. Chemistry 196 and 197 is an approved sequence in general education. Lectures, recitations, and laboratory. I; 4. Prerequisite: Two units of high school mathematics.
197. GENERAL CHEMISTRY. Continuation of Chemistry 196. A student with a grade of "C" or better in Chemistry 197 may be admitted to Chemistry 104, 105, or 106. Credit for Chemistry 196, 197 and 104, 105, or 106 shall not exceed ten hours. II; 4. Prerequisite: Chemistry 196.
247. ELEMENTARY PHYSICAL CHEMISTRY. For pre-medical students only. Lectures and laboratory. I, II; 4. Prerequisite: Chemistry 122 and 133; Physics 102 or 104, or equivalent.

Civil Engineering

101. SURVEYING THEORY. Theoretical aspects of plane and topographic surveying, land surveying; computation of areas and volumes. First three weeks of summer session. S; 3. Prerequisite: General Engineering 101 or 104; Mathematics 114. *Not offered after Summer Session 1954.*
102. SURVEYING PRACTICE. Field practice of plane and topographic surveying. The use of the level, transit and tape in making engineering surveys and topographic maps. Last five weeks of summer term. At summer camp only. S; 4. Prerequisite: Civil Engineering 101, or concurrent registration therein. *Not offered after Summer Session 1954.*
103. ROUTE SURVEYING. Principles of the economic location of railways and highways; horizontal and vertical alinement for route projects; computations for earthwork quantities and distribution; railway track turnouts. I, II; 3. Prerequisite: Credit in civil engineering summer camp. *Not offered after First Semester, 1954.*
115. GENERAL SURVEYING. Use and care of surveying instruments; methods of making engineering surveys; computations of areas and volumes; contour problems; transit stadia mapping methods. I, II; 3. Prerequisite: General Engineering 101 or 104; Mathematics 114.
160. BUILDING CONSTRUCTION. Materials, types of construction, and details for buildings. I, II; 3. Prerequisite: Sophomore standing.

235. PLAIN CONCRETE. Production, properties, specification requirements and uses of Portland cement, aggregates, mixing water, and admixtures; proportioning; field practice in the production of concrete; laboratory practice including tests on materials and concrete of various proportions; calculations and graphs based on values from concrete proportioning projects. I, II; 2. Prerequisite: Sophomore standing in engineering, architecture, or landscape architecture.

Economics

100. INTRODUCTION TO BUSINESS. An introductory course on the principles and practices of our economic system from the point of view of the business manager. Open to freshmen only. I, II; 3.
102. PRINCIPLES OF ECONOMICS. Principles of production, supply, demand, value, price, distribution. I, II; 3. Prerequisite: One year of university work.
103. PRINCIPLES OF ECONOMICS. Principles of economics as applied to exchange, money, banking, price changes, governmental finance, etc. I, II; 3. Prerequisite: Economics 102.
108. ELEMENTS OF ECONOMICS. A brief presentation of price determination, international trade and exchange, money and banking, and public finance. For non-commerce students only. Not open to those who have had Economics 102 and 103. I, II; 3. Prerequisite: One year of university work.
136. ECONOMIC HISTORY OF THE UNITED STATES. Main events and leading personalities in the economic development of the United States as seen in the westward movement, the growth of industry, agriculture, commerce, finance, transportation, the trust movement, and labor, 1790—Present. Open to freshmen only. I, II; 3.
138. INTRODUCTION TO THE ECONOMIC HISTORY OF MODERN EUROPE. The evolution of the economic institutions of modern Europe in relation to the development of industry, commerce, transportation, and finance in the principal European nations. For freshmen only. I, II; 3.
170. ELEMENTS OF STATISTICS. Methods of collection—presentation and interpretation of quantitative economic data, averages, dispersion, index numbers, reliability of statistics, time series analysis, and simple correlation. I, II; 3. Prerequisite: Economics 102 or 108; sophomore standing.

Education

100. THE AMERICAN PUBLIC SCHOOL. Introduction to the study of education. I, II; 2. Prerequisite: Sophomore standing.
101. NATURE OF THE TEACHING PROFESSION: AN ORIENTATION COURSE. This course is designed to help the student get answers to the questions: "What does education in its various branches have to offer?" and "What preparation in general education, subject matter fields, and professional education is required or desirable?" Through an extensive testing and counseling program this course is designed to help the student evaluate his potentialities and problems with reference to becoming a teacher. I, II; 2.
109. EDUCATIONAL PSYCHOLOGY. The basic undergraduate course in psychology of education for prospective teachers. Materials and principles from the various areas of psychology (mental hygiene, learning, etc.) are applied to the practical problems of teaching. I, II; 3. Prerequisite: Psychology 100.

Electrical Engineering

114. WIRING AND ILLUMINATION. Fundamentals of commercial and industrial illumination and wiring practice. Open to architecture and architectural engineering students only. I, II; 3. Prerequisite: Sophomore standing, or consent of instructor.
126. ELECTRIC CIRCUITS AND FIELDS. Study of units and relations in electric and magnetic circuits and fields. Basic concepts of circuit parameters. I, II; 4. Prerequisite: Physics 103; Mathematics 132; credit or registration in Physics 104 and Mathematics 142.

English

101. INTRODUCTION TO POETRY. Understanding of poetry through the reading and discussion of representative poems. I, II; 3. Students with 95 or more credit hours receive only 2 hours credit. Note: Credit is not given for English 101, 102, and 103 in addition to English 121 and 122. This course, plus English 102 and 103, satisfies the humanities requirement in general education.
102. INTRODUCTION TO DRAMA. Understanding of drama through the reading and discussion of representative plays. The reading list will include selections from Greek, Elizabethan, and modern English, continental, and American drama. I, II; 3. Students with 95 or more credit hours receive only 2 hours credit. See note under English 101.
103. INTRODUCTION TO FICTION. Understanding of fiction through the reading and discussion of representative short stories and novels. The reading list will include Jane Austen's *Pride and Prejudice,* Balzac's *Pere Goriot,* Dostoyevsky's *Crime and Punishment,* E. M. Forster's *A Passage to India,* and Hemingway's *A Farewell to Arms.* I, II; 3. Students with 95 or more credit hours receive only 2 hours credit. See note under English 101.
113. AMERICAN LITERATURE. A survey of American literature with lectures on the historical and cultural background. From 1620 to the Civil War. I, II; 3. Prerequisite: Sophomore standing, or exemption from Rhetoric 102.
114. AMERICAN LITERATURE. A survey of American literature with lectures on the historical and cultural background. From the Civil War to the 20th Century. I, II; 3. Prerequisite: Sophomore standing, or exemption from Rhetoric 102.
121. CHIEF ENGLISH WRITERS BEFORE 1800. *Canterbury Tales, Utopia,* three plays of Shakespeare, *Paradise Lost, Gulliver's Travels, Tom Jones, Life of Johnson, Rasselas.* Particularly recommended for students in professional and technical courses such as law, medicine, commerce, engineering, etc. Credit is not given for English 121 in addition to English 101, 102, and 103. This course, plus English 122, satisfies the humanities requirement in general education. I, II; 4. Prerequisite: Sophomore standing or exemption from Rhetoric 102.
122. CHIEF ENGLISH WRITERS OF THE NINETEENTH CENTURY. Wordsworth, Byron, Carlyle's *Past and Present,* Arnold's prose and poetry, FitzGerald's *The Rubaiyat of Omar Khayyam,* readings from T. H. Huxley, Browning's poems, and two novels. Particularly recommended for students in professional and technical courses, such as law, medicine, commerce, engineering, etc. Credit is not given for English 122 in addition to English 101, 102, and 103. This course, plus English 121, satisfies the humanities requirement in general education. I, II; 4. Prerequisite: Sophomore standing or exemption from Rhetoric 102.
131. INTRODUCTION TO SHAKESPEARE. I, II; 3. Prerequisite: Sophomore standing or exemption from Rhetoric 102.
144. CONTEMPORARY POETRY. American poetry from Whitman to Sandburg; and English poetry from the pre-Raphaelites to Masefield. II; 3. Prerequisite: Six hours of English literature, or junior standing.

French

101. ELEMENTARY COURSE. Grammar, pronunciation, reading of modern authors, composition, conversation. For students who have no credit in French. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. No credit for graduation is given for French 101 without French 102.
102. ELEMENTARY COURSE. Continuation of French 101. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: French 101, or one year of high school French.
103. MODERN FRENCH. Rapid reading of modern authors, syntax, and composition. I, II; 4. Prerequisite: French 102, or two years of high school French.
104. MODERN FRENCH. Continuation of French 103. I, II; 4. Prerequisite: French 103, or three years of high school French.

201. INTRODUCTION TO FRENCH LITERATURE. I; 3. Prerequisite: French 104, or four years of high school French.
202. INTRODUCTION TO FRENCH LITERATURE. II; 3. Prerequisite: French 104, or four years of high school French.

General Engineering

101. ELEMENTS OF DRAWING. Lettering; orthographic projection; working drawings; chart and diagram drawing; isometric and oblique drawing; free-hand sketching; tracings; methods of reproducing drawings. I, II; 3. Prerequisite: Plane geometry.
102. DESCRIPTIVE GEOMETRY. Theory of projections; solution of theoretical and practical problems involving size, shape, and relative position of common geometrical magnitudes such as points, lines, planes, curved surfaces, and solids; intersections, developments, shades and shadows, perspective drawing; I, II; 3. Prerequisite: Plane and solid geometry.
104. ADVANCED DRAWING. Review of orthographic projection and working drawings; isometric, oblique, perspective, chart and diagram, topographical, architectural and structural drawing. I, II; 3. Prerequisite: General Engineering 101, or substantial equivalent.
107. ARCHITECTURAL PROJECTIONS. Instrumentation; lettering; projection; intersections; conventions; shades and shadows. I, II; 2. Prerequisite: Plane geometry.
108. ARCHITECTURAL PROJECTIONS. Shades and shadows; oblique, isometric, and perspective drawings; developments. I, II; 2. Prerequisite: General Engineering 107.
203. AIRCRAFT DRAFTING AND LOFTING. Aircraft terminology, control and reference surfaces and systems; sheet metal terminology and fabrication; drafting standards and types of drawings; drafting room manuals and standard handbooks; descriptive geometry applied to simple layouts and details; aircraft fastenings; lofting—plane, tapered, and double curved surfaces, airfoils, intersections; practices and standards. I, II; 3. Prerequisite: General Engineering 101 or substantial equivalent.
210. INDUSTRIAL PRODUCTION ILLUSTRATION. Mechanical and free-hand drawings in axonometric, oblique and perspective; shades and shadows; rendering of drawings with various media including some work with the airbrush; industrial production illustration. An approved elective in all engineering curricula. I, II; 3. Prerequisite: General Engineering 102, or 107 and 108.
212. GRAPHICAL CALCULATIONS. Use of various types of slide rules with special attention to the log-log scales; rectification of curves from laboratory data to devise empirical equations using various types of coordinate paper, construction and use of nomographs or aligning charts. For students in engineering; accepted as an approved elective in all engineering curricula. I, II; 1. Prerequisite: General Engineering 101, or equivalent; Mathematics 112, 114, and 122.

Geography

101. ELEMENTS OF GEOGRAPHY. The geographic point of view; elements of physical landscape; planetary relations, weather, climate, climatic regions, landforms, natural resources. Geography 101 and 111 meet the general education requirement in physical science; Geography 101 and 104 meet the general education requirement in social science, in the College of Liberal Arts and Sciences. Lectures, discussions, and quiz. I, II; 5. Students with 95 or more credit hours receive only 4 hours credit.
104. WORLD REGIONAL GEOGRAPHY. Survey of the geographic structure of the world; regional patterns of settlement and land utilization; man's occupancy of the world. I, II; 3. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: Geography 101 or consent of instructor.

105. INTRODUCTORY ECONOMIC GEOGRAPHY. Man's utilization of the major economic resources of the world from the standpoint of geographic patterns. Primarily for commerce students but open to others except those having credit in Geography 106. I, II; 3. Students with 95 or more credit hours receive only 2 hours credit.
111. INTRODUCTORY METEOROLOGY. The atmosphere; its composition, functions and behavior in the production of various weather types; air masses; application to present-day activities. Lectures and quiz. I, II; 3. Prerequisite: Geography 101, or consent of instructor.
123. GEOGRAPHY OF ILLINOIS. Detailed regional study of the state with special emphasis on the cultural relations of Illinois to the rest of the nation. II; 3. Prerequisite: Geography 101, or 104, or 106, or consent of instructor.

Geology

101. PHYSICAL GEOLOGY. Materials, structures, surface features of the earth and processes which have produced them. Lectures, quiz, and laboratory. One-half day field trip required. Geology 101 and 102 meet the general education requirement in the physical sciences. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit.
102. HISTORICAL GEOLOGY. Evolution of the earth and its life. Lectures and laboratory. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Geology 101, or Division of General Studies 141.
131. MINERALOGY. A systematic study of minerals and common rocks. Lecture and laboratory. I; 3. Prerequisite: One semester of college chemistry.
132. MINERALOGY. Continuation of Geology 131. A systematic study of minerals and common rocks. Lecture and laboratory. II; 3. Prerequisite: Geology 131.
150. GEOLOGY FOR ENGINEERS. I, II; 3. Prerequisite: Sophomore standing in the College of Engineering.

German

101. ELEMENTARY COURSE. Oral practice, reading, and grammar for beginners. Not open to students who have had high school credit in this language. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. No credit toward graduation is given for German 101 without German 102.
102. ELEMENTARY COURSE. Continuation of German 101. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: German 101, or one year of high school German.
103. INTERMEDIATE COURSE. Modern narrative prose. Oral practice and sight reading. I, II; 4. Prerequisite: German 102, or two years of high school German, or equivalent.
104. INTERMEDIATE COURSE. Continuation of German 103. Literary reading. Classical and modern narrative prose. Oral practice and sight reading. I, II; 4. Prerequisite: German 103, or three years of high school German, or equivalent.
113. PRACTICE IN CONVERSATION. Oral practice for the development of elementary skill in conversation and the improvement of pronunciation. This course is supplementary to German 103 and 104. I, II; 2. Prerequisite: German 102, or two years of high school German; concurrent registration in German 103 or 104.
210. MASTERPIECES OF GERMAN LITERATURE. Introduction to German literature, its subjects, forms, and ideals. I, II; 3. Prerequisite: German 104, 144, two years of college German, or equivalent.

History

111. MODERN EUROPEAN HISTORY FROM THE RENAISSANCE TO 1848. Europe from the age of the great discoveries to the close of the Napoleonic wars. I; 4. Students with 95 or more credit hours receive only 3 hours credit.

112. MODERN EUROPEAN HISTORY, 1848 TO THE PRESENT. Development of European nationalism, liberalism, and imperialism; World War; reconstruction. II; 4. Students with 95 or more credit hours receive only 3 hours credit.
131. HISTORY OF ENGLAND TO 1688. History of the British people to 1688. I; 3. Students with 95 or more credit hours receive only 2 hours credit.
132. HISTORY OF ENGLAND, 1688 TO 1953. Modern history of the United Kingdom; colonial and imperial development. II; 3. Students with 95 or more credit hours receive only 2 hours credit.
151. HISTORY OF THE UNITED STATES TO 1865. Colonial foundations, the movement for independence, early years of the Republic. I; 3. Prerequisite: Sophomore standing.
152. HISTORY OF THE UNITED STATES, 1865 TO 1953. A century of national life and organization. I; 3. Prerequisite: Sophomore standing.
181. THE ANCIENT WORLD. Ancient empires and Greece. I; 3. Prerequisite: Sophomore standing.
182. THE ANCIENT WORLD. Rome. II; 3. Prerequisite: Sophomore standing.

Hygiene

101. PERSONAL AND ENVIRONMENTAL HYGIENE. This course or Hygiene 104 is required of all undergraduate men and women during their first year of residence. I, II; 2. Students with 95 or more credit hours receive only 1 hour credit. Students who expect to take Hygiene 110 should fulfill the undergraduate hygiene requirement by taking Hygiene 104 instead of Hygiene 101.
104. PERSONAL AND COMMUNITY HEALTH. This course or Hygiene 101 is required of all undergraduate men and women during their first year of residence. I, II; 2. Students with 95 or more credit hours receive only 1 hour credit. Students who expect to take Hygiene 110 should take Hygiene 104 (the prerequisite). Hygiene 104 is a more comprehensive course than Hygiene 101 for those interested in a more intensive study of personal and community hygiene. It is especially designed for teachers, coaches, social workers, and others who feel they will need this course in their future professional work.
110. PUBLIC HEALTH. Material presented deals with information about community public health problems and the programs designed to prevent disease and promote health education. This is especially valuable for all people who go into health professions or related community work. Field trips and surveys supplement class work. Teachers, coaches, social workers will need this course in their future professional work. I, II; 2. Students with 95 or more credit hours receive only 1 hour credit. Prerequisite: Hygiene 104.

Management

101. INDUSTRIAL ORGANIZATION AND MANAGEMENT. Organization plans, administrative policies, and management problems with special attention to manufacturing units. I, II; 3. Prerequisite: Economics 102, or 108, or consent of Associate Dean of the college.

Marketing

101. PRINCIPLES OF MARKETING. The functions, commodities, and middlemen involved in the marketing of goods and services; the policies and problems involved in the operation of market institutions. I, II; 3. Prerequisite: Economics 102, or 108, or consent of Associate Dean of the college.

Mathematics

101. BASIC MATHEMATICS. A systematic presentation of the fundamentals of arithmetic, algebra, plane geometry, trigonometry, and statistics. For Liberal Arts and Science students only. Required of students in the general curriculum of the College of Liberal Arts and Sciences whose entrance credits do not include one year of algebra and one year of plane geometry. II;3.

102. BASIC MATHEMATICS. Continuation of Mathematics 101. I; 3. Prerequisite: Mathematics 101.

103 INTRODUCTION TO COLLEGE ALGEBRA. I, II; 3. Students having 1½ entrance units in algebra receive no credit. Students with 95 or more credit hours receive no credit.

104. ELEMENTS OF ALGEBRA AND TRIGONOMETRY. For premedical students who have entered with only one unit of high school algebra and who need credit in trigonometry as a prerequisite to physics. This course does not serve as a prerequisite for Mathematics 122. Premedical students who enter with 1½ units of algebra must take Mathematics 114. I, II; 3. Prerequisite: High school algebra, 1 unit; plant geometry, 1 unit.

106. SOLID GEOMETRY. Satisfies deficiency in solid geometry for engineering students; all other students receive full credit. I, II; 3. Prerequisite: Entrance algebra, 1 unit; plane geometry, 1 unit.

108. ELEMENTARY PLANE GEOMETRY FOR VETERANS. This course deals with the usual topics of high school geometry. It is designed as a refresher course for veterans who are deficient in this area of basic mathematics. Students may meet entrance requirements for the Colleges of Commerce and Engineering through this course. I, II; no credit.

109. FUNDAMENTALS OF MATHEMATICS. For students who do not specialize in mathematics. A survey of the character of mathematics as a subject and of its relations to science, art, philosophy, and knowledge in general. Mathematics 109 and 110 meet the physical science requirement in general education in Liberal Arts and Sciences. I, II; 4. Prerequisite: Consent of the department.

110. FUNDAMENTALS OF MATHEMATICS. For students who do not specialize in mathematics. A survey of the character of mathematics as a subject and of its relations to science, art, philosophy, and knowledge in general. Mathematics 109 and 110 meet the physical science requirement in general education in Liberal Arts and Sciences. II;4. Prerequisite: Mathematics 109.

112. COLLEGE ALGEBRA. I, II; 3. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: Entrance algebra, 1½ units, or Mathematics 103; plane geometry, 1 unit, or Mathematics 108.

114. PLANE TRIGONOMETRY. I, II; 2. Students with 95 or more credit hours receive only 1 hour credit. Prerequisite: Entrance algebra, 1½ units, or Mathematics 103; plane geometry, 1 unit, or Mathematics 108.

117. COMBINED FRESHMAN MATHEMATICS. A combined course integrating all the usual topics of algebra, trigonometry, and analytic geometry, and also some topics of differential calculus. For students of chemistry, chemical engineering, ceramic engineering, ceramics, and architecture. I; 5. Prerequisite: Entrance algebra, 1½ units; plane geometry, 1 unit.

122. ANALYTIC GEOMETRY. Plane and solid analytic geometry. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Mathematics 111 or 112, and 114 or 115.

123. ANALYTIC GEOMETRY. Plane and solid analytic geometry. I, II; 5. Students with 95 or more credit hours receive only 4 hours credit. Prerequisite: Mathematics 111 or 112, 114 or 115.

127. COMBINED FRESHMAN MATHEMATICS. Continuation of Mathematics 117. I, II; 4. Prerequisite: Mathematics 117.

132. CALCULUS . First course for students of mathematics and engineering. I, II; 5. Prerequisite: Mathematics 122.

133. CALCULUS. First course for students of mathematics and engineering. I, II; 3. Prerequisite: Mathematics 122 or 123. *Offered for the first time February, 1954.*

137. CALCULUS. For students of chemistry, chemical engineering, ceramics, ceramic engineering, and architecture. I; 3. Prerequisite: Mathematics 117 and 127, or consent of department.

142. CALCULUS. Second course for students of mathematics and engineering. I, II; 3. Prerequisite: Mathematics 132.

147. CALCULUS. Continuation of Mathematics 137. II; 3. Prerequisite: Mathematics 137.

161. STATISTICS. II, 3. Prerequisite: Mathematics 111 or 112; sophomore standing.

341. DIFFERENTIAL EQUATIONS. II; 3. Prerequisite: Mathematics 132 and 142, or 137 and 147.

Mechanical Engineering

171. MECHANISM. A study of the transmission and modification of motion by linkwork, cams, gears, belts, ropes, chains, etc.; theory of gear tooth action; gear tooth systems and production methods; point paths, displacement diagrams. I, II; 2. Prerequisite: General Engineering 101; registration in Physics 103.
182. MANUFACTURING PROCESSES. Foundry practice; pattern design; hot and cold forming. Welding and allied processes; machine tools and machining practice; use of jigs, fixtures, and tools for manufacture of interchangeable parts. Classroom discussion and demonstrations. I, II; 3. Prerequisite: Sophomore standing in aeronautical engineering, or consent of instructor.
183. MATERIALS CASTING. Casting as a process of fabrication; the molding process including machine molding; molding sands characteristics, control, and testing. Melting and pouring practice. Physical characteristics of cast materials, advantages, and disadvantages; tray iron structures and elementary metallurgical concepts; design of wood and metal patterns and correlation with foundry practice; core requirements control and testing. I, II; 3. Prerequisite: General Engineering 101 or 104; sophomore standing.
184. METAL PROCESSING. Basic machining processes used for metal processing. Use of machine tools, jigs, fixtures, gages, and measuring instruments and inspection methods to produce interchangeable metal parts. I, II; 3. Prerequisite: General Engineering 101 or 104; sophomore standing.
209. THERMODYNAMICS AND HEAT TRANSFER. Thermodynamic analysis of energy transfer and transformation. Properties of simple working substances. Analysis of open and closed systems, direct and reverse cycles, and processes involving transfers of mass and energy. Basic laws of heat transfer. I, II; 3. Prerequisite: Physics 108; Math. 142 or 143 (Integral Calculus).

Metallurgical Engineering

150. INTRODUCTION TO METALLURGY. Minerals and mineral dressing, fuels, refractories, roasting, sintering, and other basic processes of metallurgy. I; 3. Prerequisite: Chem. 105, or equivalent.

Military Science and Tactics

101. FRESHMAN DRILL AND THEORY. Basic military instruction to include military policy; military organization; evolution of warfare; maps, and leadership, drill and command. I; 1. Prerequisite: Military Science Department approval.
102. FRESHMAN DRILL AND THEORY. Basic military instruction to include military psychology and personnel management, geographical foundations of national power, military problems of the United States; and leadership, drill and command. II; 1. Prerequisite: Military Science 101 or equivalent.
103. INFANTRY SOPHOMORE DRILL AND THEORY. Basic infantry instruction to include leadership, drill, and exercise of command, organization of infantry units, weapons, marksmanship, technique of fire of rifle squad, combat formations, scouting and patrolling, tactics of rifle squad. I; 1. Prerequisite: Military Science 102 or equivalent.
104. INFANTRY SOPHOMORE DRILL AND THEORY. Continuation of Military Science 103. II; 1. Prerequisite: Military Science 103 or equivalent.
133. ENGINEER SOPHOMORE DRILL AND THEORY. History and tradition of the Corps of Engineers, characteristics of weapons, camouflage explosives and demolitions, hand tools, mines, tactics and field fortifications. I; 1. Prerequisite: Military Science 102 or equivalent.
134. ENGINEER SOPHOMORE DRILL AND THEORY. Continuation of Military Science 133. II; 1. Prerequisite: Military Science 133.

163. ARTILLERY (ANTIAIRCRAFT) SOPHOMORE DRILL AND THEORY. Introduction, characteristics, and service of the piece of AAA automatic weapons and 90-mm AAA guns. I; 1. Prerequisite: Military Science 102 or equivalent.
164. ARTILLERY (ANTIAIRCRAFT) SOPHOMORE DRILL AND THEORY. Continuation of Military Science 163. II; 1. Prerequisite: Military Science 163.
235. CORPS OF ENGINEERS JUNIOR DRILL AND THEORY. Advanced instruction in Corps of Engineers to include bridge design and classification, engineer signal communications, engineer combat intelligence, engineer supply, military roads and runways, organization of engineer units, organization of combat divisions, tactics of engineer units, vehicle operations and maintenance, water supply and individual weapons and marksmanship. I; 3. Prerequisite: Military Science 134 or equivalent. Open to students pursuing any engineering curricula or applied course such as geology, chemistry, physics, etc.
236. CORPS OF ENGINEERS JUNIOR DRILL AND THEORY. Continuation of Military Science 235. II; 3. Prerequisite: Military Science 235.
265. ARTILLERY (ANTIAIRCRAFT) JUNIOR DRILL AND THEORY. Advanced antiaircraft artillery instruction to include AAA tactics, basic gunnery for AAA and automatic weapons, communications, individual weapons and marksmanship, motors and transportation, organization and troop movements. I; 3. Prerequisite: Military Science 164 or equivalent.
266. ARTILLERY (ANTIAIRCRAFT) JUNIOR DRILL AND THEORY. Continuation of Military Science 265. II; 3. Prerequisite: Military Science 265.

Philosophy

101. INTRODUCTION TO PHILOSOPHY. Discussion of problems in the field of morals, art, and knowledge, with selected readings from philosophers whose views have been influential in Western culture. I, II; 3. Prerequisite: Sophomore standing.
102. LOGIC. Reasoning, detection of fallacies, evidence. I, II; 3. Prerequisite: Sophomore standing.
105. MORAL IDEAS AND PRACTICE. I, II; 2. Credit is not given for both Philosophy 103 and 105. Prerequisite: Sophomore standing.

Physical Education for Men

101. PRESCRIBED EXERCISE. Prescribed ameliorative exercises adapted to individual needs, capacities, and interests. I, II; 1.
102. PRESCRIBED EXERCISE. Prescribed ameliorative exercises adapted to individual needs, capacities, and interests. I, II; 1.
103. PRESCRIBED EXERCISE. Prescribed ameliorative exercises adapted to individual needs, capacities, and interests. I, II; 1.
104. PRESCRIBED EXERCISE. Prescribed ameliorative exercises adapted to individual needs, capacities, and interests. I, II; 1.
106. DEVELOPMENTAL ACTIVITIES. Activities that contribute to the development and maintenance of physical fitness according to social and hygienic standards. I, II; 1.
108. BEGINNING SWIMMING. Skills, knowledge, attitudes, and conditions. S; 1. Open to non-swimmers.
112. INDIVIDUAL TUMBLING STUNTS. Skills, knowledge, attitudes, and conditions. I, II; 1.
113. DOUBLE TUMBLING STUNTS. Skills, knowledge, attitudes, and conditions. I, II; 1.
114. APPARATUS STUNTS. Skills, knowledge, attitudes, and conditions. I, II; 1.
117. BOXING. Skills, knowledge, attitudes, and conditions. I, II; 1.
118. WRESTLING. Skills, knowledge, attitudes, and conditions. I, II; 1.
120. PERSONAL DEFENSE ACTIVITIES. Skills, knowledge, attitudes, and conditions. I, II; 1.
123. WEIGHT LIFTING. Skills, knowledge, attitudes, and conditions. I, II; 1.
129. VOLLEYBALL. Skills, knowledge, attitudes, and conditions. I, II; 1.

132. ARCHERY. Skills, knowledge, attitudes, and conditions. I, II; 1.
136. BADMINTON. Skills, knowledge, attitudes, and conditions. I, II; 1.
139. BACKYARD SPORTS. Skills, knowledge, and conditions. I, II; 1.
140. BOATING AND FISHING. I, II; 1. Prerequisite: Two hours of credit in physical education and a score on the physical fitness test that allows the student a free choice of activities or approval of the Director of Physical Education.
143. AMERICAN SQUARE DANCE. I, II; 1.
150. PROFESSIONAL ORIENTATION. Introduction to the fields of physical education, athletics health, safety, recreation. For physical education majors. I, II; 2.
151. BEGINNING BASKETBALL. Introductory skills, rules, and strategy. For physical education majors. I, II; 2.
152. BEGINNING FOOTBALL. Introductory skills, rules, and strategy. For physical education majors. I, II; 2.
153. PHYSICAL CONDITIONING PROGRAMS. Physical fitness tests; calisthenics, medicine ball, bulldozer, grass, all-out and locomotor exercises; leadership techniques. For physical education majors. I, II; 2.
159. CAMP COUNSELING. Objectives, administration, counseling, activity programs, evaluation. I, II; 3.

Physical Education for Women

100. CONDITIONING ACTIVITIES. I, II; 1.
101. INDIVIDUAL GYMNASTICS. Recommendation from the Department of Health Service is necessary for registration in this course. I, II; 1.
102. MODIFIED ACTIVITIES. Prescribed recreational sports, relaxation, and exercise. I, II; 1. Prerequisite: Recommendation from the Department of Health Service.
105. ELEMENTARY RHYTHMS. I, II; 1.
106. INTERMEDIATE RHYTHMS. I, II; 1. Prerequisite: Physical Education for Women 105, or consent of instructor.
107. ADVANCED RHYTHMS. An opportunity for those who have completed previous work to further their skills in muscular control and extend their creative interests and appreciations of art through the medium of the dance. I, II; 1. Prerequisite: Physical Education for Women 105 and 106, or consent of instructor.
110. ELEMENTARY SWIMMING. S; 1.
123. BASKETBALL. I, II; 1.
124. VOLLEYBALL. I, II; 1.
125. SOFTBALL. I, II; 1.
130. BADMINTON. I, II; 1.
131. GOLF. Personal equipment to be furnished by student. I, II; 1.
132. BOWLING. S; 1.
135. ARCHERY. I, II; 1.
140. BOATING AND FISHING. Open to students who have completed two semesters of physical education. I, II; 1.
141. TUMBLING AND APPARATUS STUNTS. The side horse, parallel bars, stall bars, buck, etc. are used to develop skills in balance and coordination on apparatus. Attention is directed toward safety factors necessary in utilizing this equipment. Forward rolls, backward rolls, group and individual stunts are used. I, II; 1.
143. AMERICAN SQUARE DANCE. I, II; 1.
144. ELEMENTARY FOLK DANCE. I, II; 1.
150. PROFESSIONAL ORIENTATION. Introduction to the fields of physical education, health, safety, recreation, dance. For physical education majors. I, II; 2.
151. BODY MECHANICS AND GYMNASTICS. Skill in fundamental body movements, posture, and physical conditioning. For physical education majors. I, II; 1.
152. BASKETBALL AND SOFTBALL. Professional course. II; 1.
160. BEGINNING CONTEMPORARY DANCE. Professional course. II; 1.
200. GAMES FOR SCHOOL AND PLAYGROUND. Prerequisite: For students majoring in physical education. I, II; 2.

Physics

101. GENERAL PHYSICS (MECHANICS, SOUND, AND HEAT). Lectures with demonstrations, recitations, and laboratory. For students in arts and sciences, and architecture. I, II; 5. Prerequisite: Mathematics 114 or 117.
102. GENERAL PHYSICS (LIGHT, ELECTRICITY, AND MAGNETISM). Lectures with demonstrations, recitations, and laboratory. For students in arts and sciences, and architecture. I, II; 5. Prerequisite: Physics 101.
103. GENERAL PHYSICS (MECHANICS, SOUND, AND HEAT). Lectures with demonstrations, recitations, and laboratory. For students in engineering, mathematics, physics, and chemistry. I, II; 5. Prerequisite: Mathematics 132 or 137, or concurrent registration in these courses. *Not offered after September, 1953.*
104. GENERAL PHYSICS (ELECTRICITY, MAGNETISM, LIGHT, AND MODERN PHYSICS). Lectures with demonstrations, recitations, and laboratory. For students in engineering, mathematics, physics, and chemistry. I, II; 5. Prerequisite: Physics 103. *Not offered after February, 1954.*
105. NURSES' PHYSICS. Primarily for students in nursing education. Those basic principles of physics that are pertinent to the training and routine of nurses in both institutional and private service. A lecture and problem course with emphasis on selected recent developments in nuclear physics and radioactive tracers. Lecture-demonstrations once each week; quiz three hours each week. I, II; 4. Prerequisite: Sophomore standing or consent of instructor.
106. GENERAL PHYSICS (MECHANICS). Lectures with demonstrations, recitations, and laboratory. For students in engineering, mathematics, physics, and chemistry. I, II; 4. Prerequisite: Credit or concurrent registration in Math. 133.
107. GENERAL PHYSICS (ELECTRICITY, MAGNETISM, MODERN PHYSICS). Lectures with demonstrations, recitations, and laboratory. For students in engineering, mathematics, physics, and chemistry. I; 4. Prerequisite: Physics 106, Math. 143 or concurrent registration therein.
108. GENERAL PHYSICS (HEAT, SOUND, LIGHT, MODERN PHYSICS). Lectures with demonstrations, recitations, and laboratory. For students in engineering, mathematics, physics, and chemistry. II; 4. Prerequisite: Physics 106, Math. 143 or concurrent registration therein.
341. ELECTRICITY AND MAGNETISM. Lectures, problems, and laboratory. This course is fundamental to advanced courses and should be elected as early as possible by those intending to specialize in physics. Fundamental laws logically developed and summarized in Maxwell's equations. Forces and energies associated with electric and magnetic properties of matter. Generation and propagation of electromagnetic waves. I; 4. Prerequisite: General Physics and calculus.

Political Science

103. INTRODUCTION TO POLITICAL SCIENCE. A course designed to acquaint the students with basic concepts of political science. Topics to be covered will include the following: scope and method of political science; constitutions and forms of government; nature and problems of democracy; the making, control, and execution of public policy. I; 3.
104. INTRODUCTION TO INTERNATIONAL POLITICS. This is designed as a survey course. Topics to be covered will include the following: the development of the world system of states; the international political and economic struggle for power; the determination and conduct of foreign policy; problems involved in maintaining peace, and organizations devoted to its maintenance. II: 3.
150. AMERICAN GOVERNMENT: ORGANIZATION AND POWERS. Historical development and organization of national, state, and local governments; the federal system; national and state constitutions; civil and political rights; party system; nature, structure, powers, and procedure of legislative, executive, and judicial departments in state and nation. I, II; 3. Prerequisite: Sophomore standing.

151. AMERICAN GOVERNMENT: FUNCTIONS. Functions of national, state, and local governments; foreign relations and national defense; taxation and finance; law enforcement; police power; regulation of commerce, communications, and business; promotion of social and economic welfare; current problems. I, II; 3. Students may not receive credit for both Political Science 151 and 101 and 102. Prerequisite: Sophomore standing; Political Science 150, or consent of the department.

Psychology

100. INTRODUCTION TO PSYCHOLOGY. Introductory analysis and description of human behavior with special reference to observation, learning, memory, thinking, emotional life, and personality development. Major emphasis is placed upon psychological principles as they relate to daily life and everyday problems. I, II; 4. Prerequisite: Sophomore standing.
125. AN INTRODUCTION TO THE FIELDS OF PSYCHOLOGY. An introduction to the basic fields of psychology including the history of psychology, developmental psychology with an emphasis on the socialization of the child, individual differences, industrial, social, abnormal, and physiological psychology. I; 4. Students taking this course may not take Psychology 220 at the Urbana campus for credit. Prerequisite: Psychology 100, or its equivalent, or junior standing.
145. INDUSTRIAL PSYCHOLOGY. A consideration of socio-psychological principles of behavior in business and industry and of the scientific methods of investigation in this area, and a survey of specific methods of personnel technology. I, II; 3. Prerequisite: Psychology 100.
150. PERSONALITY AND SOCIAL BEHAVIOR. An introduction to the study of personality in relationship to the social environment. Application of psychological principles to social problems. I, II; 3. Prerequisite: Psychology 100, or equivalent.

Rhetoric

100. FRESHMAN REMEDIAL RHETORIC AND COMPOSITION. Open to students who fail the placement test for admission to Rhetoric 101. Intensive review of fundamentals, with considerable practice in composition. Students passing this course will be admitted to Rhetoric 101 without further examination. I, II; no credit.
101. FRESHMAN RHETORIC AND COMPOSITION. This course provides elementary training and practice in the comprehension and expression of written and oral English. I, II; 3. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: A passing grade on the placement examination or a passing grade in Rhetoric 100.
102. FRESHMAN RHETORIC AND COMPOSITION. This course provides elementary training and practice in the comprehension and expression of written and oral English. I, II; 3. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: Rhetoric 101.
133. EXPOSITORY WRITING. I, II; 3. Prerequisite: Rhetoric 101 and 102; sophomore standing.
144. NARRATIVE WRITING. Elements and practice of narrative writing. Not a course in short-story writing. I, II; 3. Prerequisite: Rhetoric 101 and 102; sophomore standing.
151. BUSINESS LETTER WRITING. I, II; 3. Prerequisite: Rhetoric 102. This course is not counted toward a major in English.

Social Sciences

111. THE INDIVIDUAL IN SOCIETY. A general education course designed to equip the beginning student with an understanding of the nature and the role of the individual as a member of the several groupings of his social community. I, II; 4. Credit is not given for this course to a student with credit, or concurrent registration, in a course in anthropology, psychology, or sociology. Students with 95 or more credit hours receive only 3 hours credit.

112. BASES OF AMERICAN LIFE. A general education course designed to acquaint the student with the physical, economic, political, and social developments of the United States and to equip him for intelligent active participation in local and national life. I, II; 4. Credit is not given for this course to a student with credit, or concurrent registrations, in Political Science 150 or 151 or History 151 or 152. Students with 95 or more credit hours receive only 3 hours credit.
113. WORLD PATTERNS AND WORLD PROBLEMS. A general education course designed to bring the student to an understanding of the geographic, economic, and political bases of the present world situation. I, II; 4. Credit is not given for this course to a student with credit, or concurrent registration, in Geography 103. Students with 95 or more credit hours receive only 3 hours credit.
114. THE UNITY OF KNOWLEDGE. A general education course designed to acquaint the student with the development of philosophical and scientific disciplines in intellectual history, and to equip him to direct his further general education by his awareness of the integrative factors in current education and culture. I, II; 4. Prerequisite: Sophomore standing and a 3.5 average.
116. FAMILY LIVING. The development of the family from early to modern times. The factors involved in the establishment and maintenance of a family. Opportunities for individual counseling. I, II; 4. Prerequisite: Sophomore standing or consent of instructor.

Sociology and Anthropology

Sociology

100. PRINCIPLES OF SOCIOLOGY. Concerned with the scientific study of human societies. I, II; 3. Prerequisite: Sophomore standing.
130. SOCIETY AND INDIVIDUAL DEVELOPMENT. Nature of person and relation to institutions, social order, and development. I, II; 3. Prerequisite: Sociology 100.
140. SOCIAL CONTROL. Sociological principles, institutional and other means and techniques of social control. I, II; 2. Prerequisite: Sociology 100.

Anthropology

107. INTRODUCTION TO ANTHROPOLOGY. An introduction to general anthropology covering human origins and early man; race and racism, archaeology and the beginnings of human civilization, linguistics, and the nature of culture with examples from primitive societies. I, II; 3. Prerequisite: Sophomore standing.

Spanish

101. ELEMENTARY SPANISH. For students who have no credit in Spanish. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. No credit toward graduation is given for Spanish 101 without 102.
102. ELEMENTARY SPANISH. Continuation of Spanish 101. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Spanish 101, or one year of high school Spanish.
103. INTERMEDIATE SPANISH. Rapid reading, review of grammar, composition, conversation. I, II; 4. Prerequisite: Spanish 102, or two years of high school Spanish.
104. INTERMEDIATE SPANISH. Continuation of Spanish 103. I, II; 4. Prerequisite: Spanish 103, or three years of high school Spanish.
113. ELEMENTARY COMPOSITION AND CONVERSATION. Conducted largely in Spanish. May be taken concurrently with Spanish 103. Does not count toward the major in Spanish. I, II; 2. Prerequisite: Spanish 102, or two years of high school Spanish.
201. INTRODUCTION TO SPANISH LITERATURE. Reading of modern authors of Spain and Spanish America. I; 3. Prerequisite: Spanish 104, or four years of high school Spanish.

202. INTRODUCTION TO SPANISH LITERATURE: Reading of modern authors of Spain and Spanish America. II; 3. Prerequisite: Spanish 201 or consent of instructor.

Speech

101. PRINCIPLES OF EFFECTIVE SPEAKING. Preparation and presentation of short informative and persuasive speeches, with emphasis on the selection and organization of material, methods of securing interest and attention, and the elements of delivery. I, II; 3. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: A passing grade in Rhetoric 101 placement examination or a passing grade in Rhetoric 100.
105. VOICE AND ARTICULATION. A drill course for the improvement of the normal speaking voice. II, 2. Students with 95 or more credit hours receive only 1 hour credit.
107. PARLIAMENTARY PROCEDURE. Principles and practice of parliamentary procedure. I, II; 2. Students with 95 or more credit hours receive only 1 hour credit.
111. BUSINESS AND PROFESSIONAL SPEAKING. Study, preparation, and presentation of the chief types of business speeches, with special attention to conferences, sales talks, interviews, job applications. I, II; 2. Prerequisite: Speech 101; sophomore standing.
117. ARGUMENTATION. Methods of logical analysis; the kinds and forms of argument; the adaptation of argumentative materials to audience situations; and the forms of debate. Practice debates on current subjects. I, II; 3. Prerequisite: Speech 101; sophomore standing.
141. ORAL INTERPRETATION OF LITERATURE. Principles of interpretations, analysis, and oral reading of prose literature and verse. I, II; 2. Students with 95 or more credit hours receive only 1 hour credit.
161. FUNDAMENTALS OF ACTING. A study of the methods of acting, with emphasis given to basic stage techniques. The role of the character in relation to the play as a whole; the intellectual and emotional values of the play and their interpretation by means of voice and acting. I, II; 3. Prerequisite: Speech 141.

Theoretical and Applied Mechanics

150. ANALYTICAL MECHANICS (STATICS). Resultants of force systems, algebraic and graphical condition of equilibrium of force systems. Analysis of forces acting on members of trusses, frames, etc. Forces due to friction. Centroids. I, II; 2. Prerequisite: Registration in Mathematics 142.
154. ANALYTICAL MECHANICS (STATICS AND DYNAMICS). A combination of Theoretical and Applied Mechanics 150 and 211 with less emphasis on some topics. For electrical engineering students only. I, II; 4. Prerequisite: Registration in Mathematics 142.
156. ANALYTICAL MECHANICS (STATICS AND DYNAMICS). A combination of Theoretical and Applied Mechanics 150 and 211. I, II; 5. Prerequisite: Registration in Mathematics 142.
171. ELEMENTS OF MECHANICS (STATICS). Resultants and equilibrium of force systems; conditions of equilibrium applied to trusses, frames, etc.; forces due to friction; centroids; stress and deformation in direct tension and compression; riveted and welded joints; properties of materials. For architects only. I, II; 3. Prerequisite: Mathematics 122.
172. STRENGTH OF MATERIALS. Relationships between external forces acting on beams and the stresses produced; shear, moment, slope, and deflection diagrams; moment of inertia; columns. For architects only. I, II; 3. Prerequisite: Theoretical and Applied Mechanics 171.
211. ANALYTICAL MECHANICS (DYNAMICS). Displacement, velocity and acceleration of a particle; relation between forces acting on rigid bodies and the changes in motion produced; translation; rotation; plane motion; solutions using the principles of force, mass, and acceleration, work and energy, and impulse and momentum. I, II; 3. Prerequisite: Theoretical and Applied Mechanics 150.

CALENDAR

Chicago Undergraduate Division

1953—FIRST SEMESTER

Sept. 9, Wed.—Sept. 16, Wed. . . . . Orientation Period
Sept. 17, Thurs.—Sept. 19, Sat. . . . . Registration
Sept. 21, Mon. . . . . Instruction Begins
Nov. 25, Wed., 6 p.m. . . . . Thanksgiving Vacation Begins
Nov. 30, Mon., 8 a.m. . . . . Thanksgiving Vacation Ends
Dec. 3, Thurs. . . . . Illinois Day (State admitted to the Union, 1818)
Dec. 22, Tues., 6 p.m. . . . . Christmas Vacation Begins
Jan. 4, Mon., 8 a.m. . . . . Christmas Vacation Ends
Jan. 15, Fri.—Jan. 23, Sat. . . . . Semester Examinations

1954—SECOND SEMESTER

Feb. 1, Mon.—Feb. 3, Wed. . . . . Orientation Period
Feb. 4, Thurs.—Feb. 6, Sat. . . . . Registration
Feb. 8, Mon. . . . . Instruction Begins
Mar. 2, Tues. . . . . University Day (University opened, 1868)
Apr. 15, Thurs., 6 p.m. . . . . Easter Vacation Begins
Apr. 22, Thurs., 8 a.m. . . . . Easter Vacation Ends
May 7, Fri. . . . . Honors Day
May 30, Sun. . . . . Memorial Day
May 31, Mon. . . . . Holiday
June 1, Tues.—June 9, Wed. . . . . Semester Examinations

1954—SUMMER SESSION

June 18, Fri.—June 19, Sat. . . . . Registration
June 21, Mon. . . . . Instruction Begins
July 4, Sun. . . . . Independence Day
July 15, Mon. . . . . Holiday
Aug. 13, Fri.—Aug. 14, Sat. . . . . Summer Session Examinations

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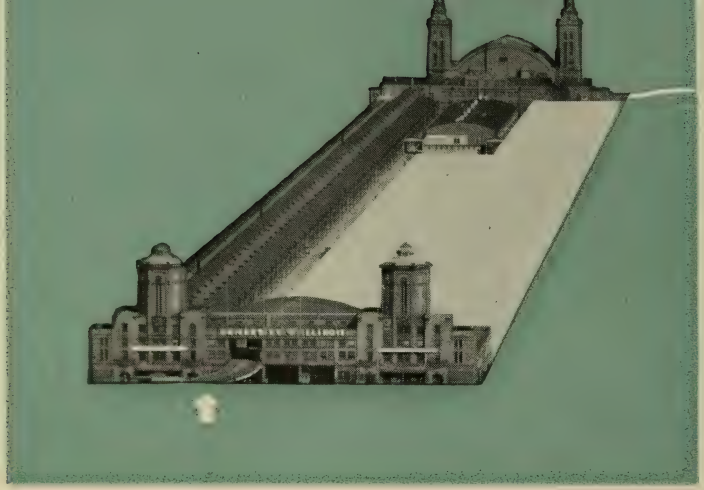

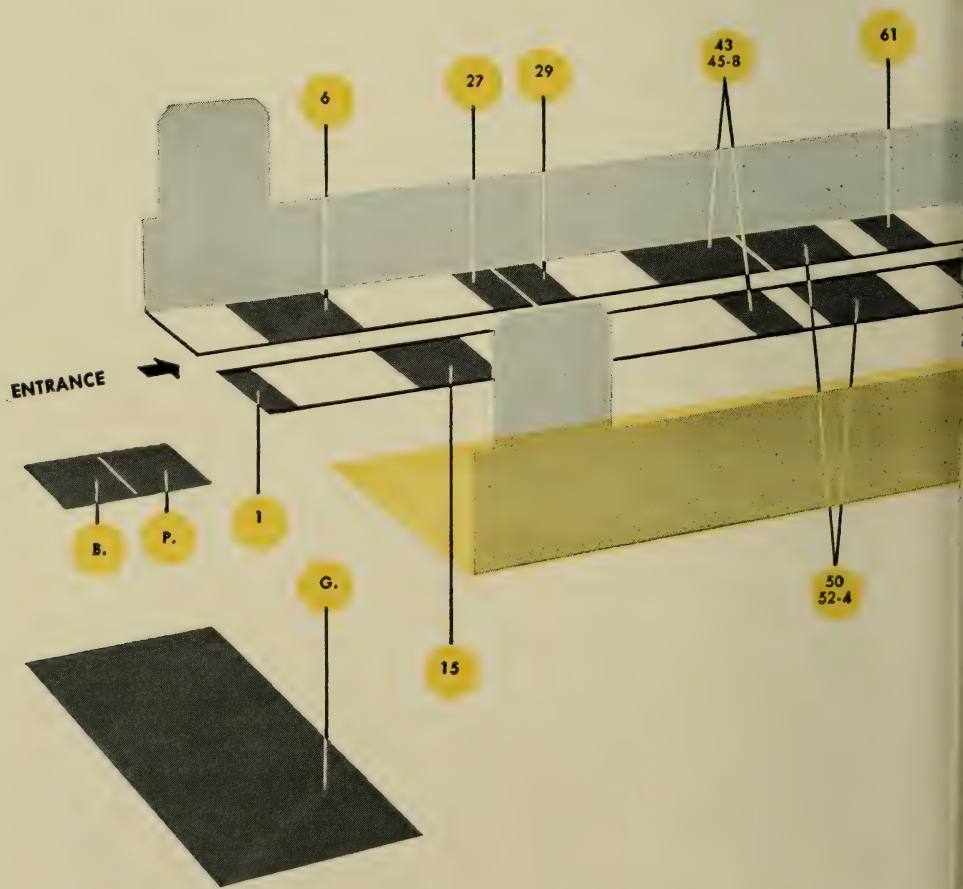
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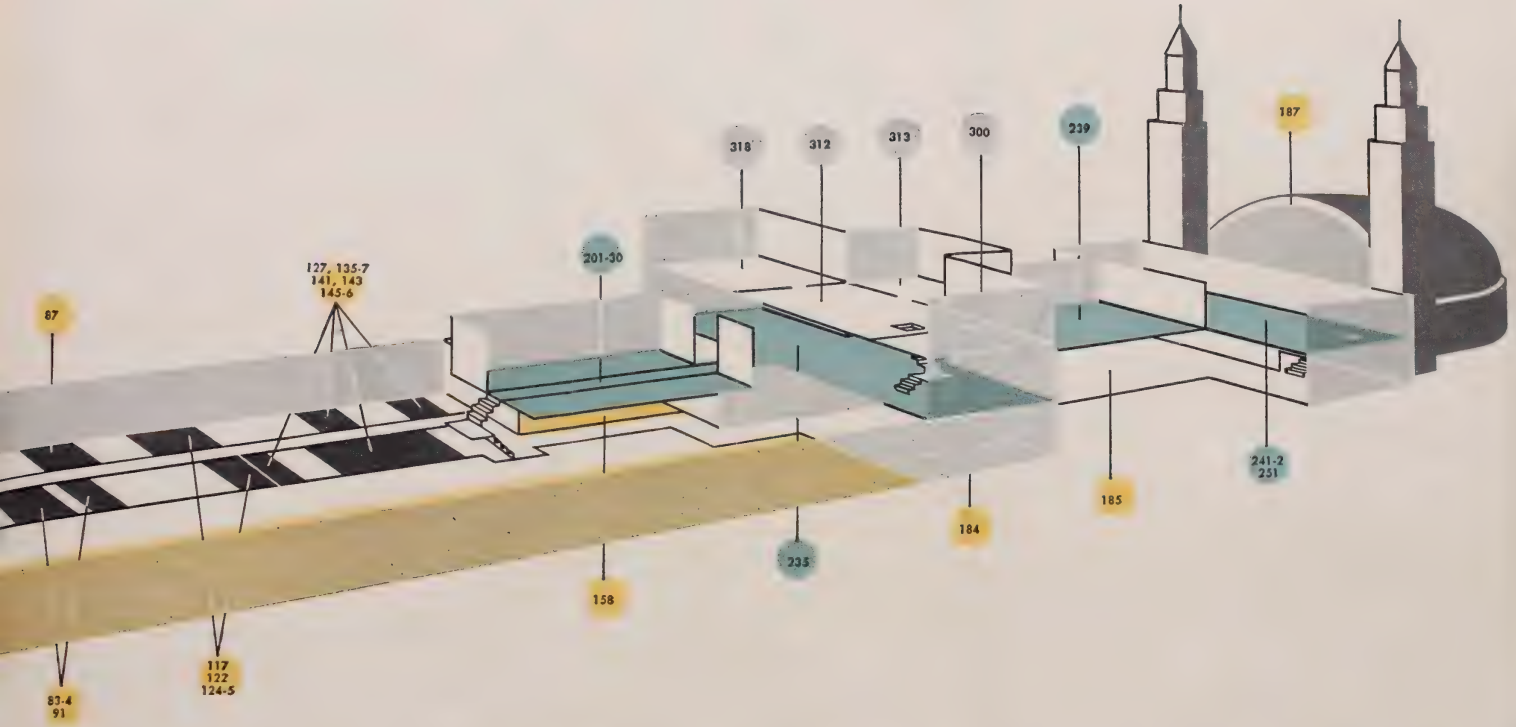

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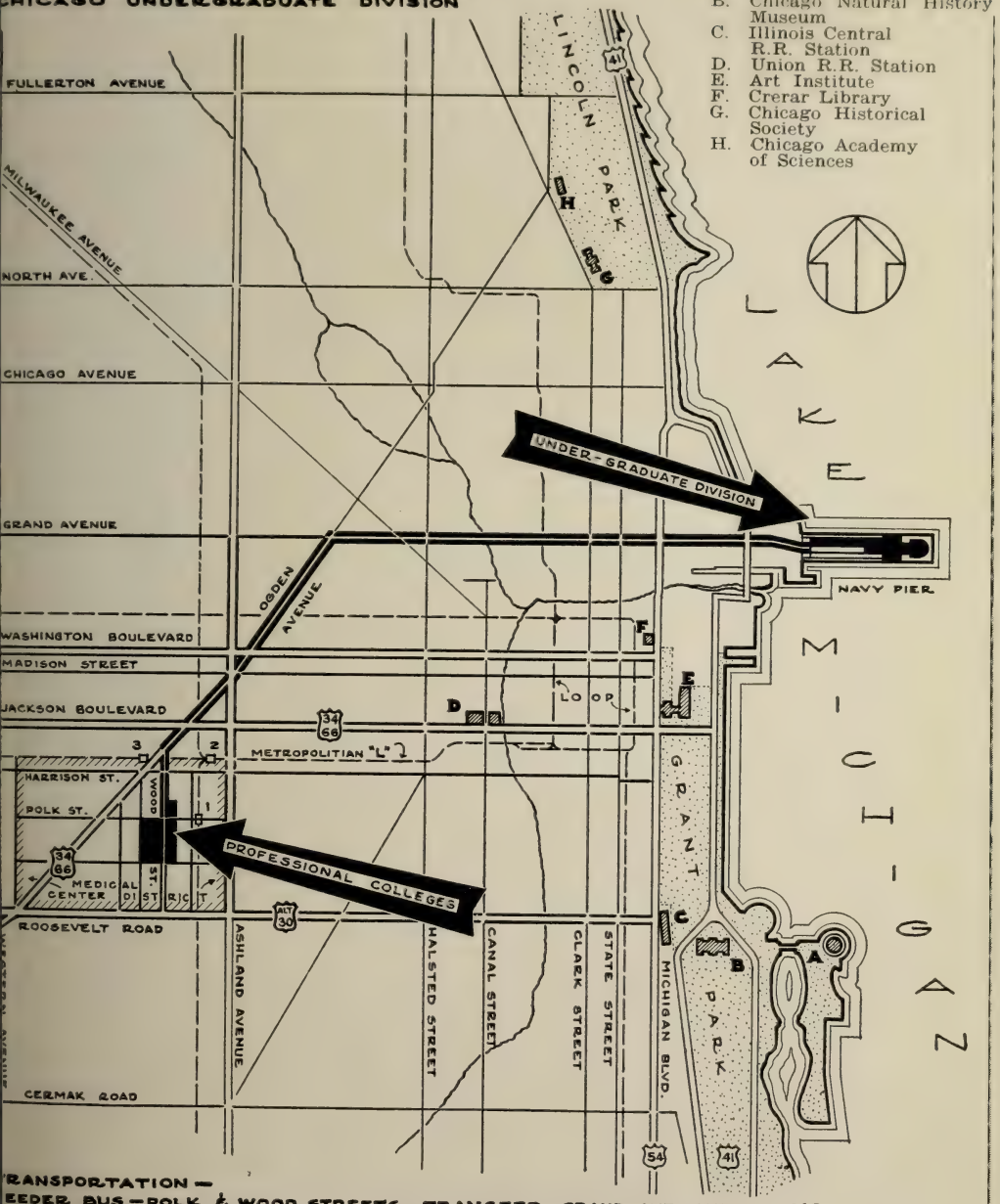
UNIVERSITY OF ILLINOIS

CHICAGO PROFESSIONAL COLLEGES
CHICAGO UNDERGRADUATE DIVISION



TRANSPORTATION—
FEEDER BUS—POLK & WOOD STREETS, TRANSFER GRAND AVE. STREET CAR.
STREET CAR—ASHLAND CAR ON PAULINA ST., TRANSFER GRAND AVENUE.
"L" STATIONS: 1-POLK ST. 2-MARSHFIELD 3-OGDEN AVE., ALL TRAINS TO LOOP,
TRANSFER STONY ISLAND STREET CAR.

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Chicago

Undergraduate Division

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Your University

The Chicago Undergraduate Division of the University is entering its ninth school year. Since October, 1946, this two-year branch of the University of Illinois has offered a well-rounded educational program to thousands of students who found it to their advantage to live in the Chicago metropolitan area while attending college.

Complete preprofessional freshman and sophomore courses of study are offered in the College of Liberal Arts and Sciences with a three-year curriculum for premedical students. Professional two-year curricula are available in the College of Commerce and Business Administration and the College of Engineering. In addition, architecture and architectural engineering curricula, as a part of the College of Fine and Applied Arts, are offered under the administration of the College of Engineering.

Professional curricula in physical education, teacher education, and a program leading to a Bachelor of Science degree in nursing are also available. The basic course and the first year of the advanced course in R.O.T.C. have been established for men students.

Students enrolled at the Chicago Undergraduate Division have the same status as students matriculating on the Urbana campus. Courses of instruction, the schedule of fees, and admission requirements are the same on both campuses.

Excellent instructional facilities are provided in the school's sixty-eight classrooms and thirty-three modern, fully-equipped laboratories. A 70,000-volume library, food service, well-furnished lounges, and recreational facilities supplement the academic program. A large gymnasium adjacent to the Pier houses the athletic program.

As an important part of the services of the Student Counseling Bureau, educational and vocational guidance examinations are offered to prospective students. Counseling services of the Bureau, as well as the facilities of the offices of the Dean of Students and his assistants, the Dean of Men and Dean of Women, are available to students at all times.

The Chicago Undergraduate Division, through its educational, social, and cultural program, strives to provide its student body with the same high degree of service which has been so long a part of University of Illinois tradition.

Admission

THERE ARE SEVEN STEPS

In order to become a student at the Chicago Undergraduate Division of the University of Illinois, an applicant must take the following steps:

1. Obtain an application for admission. The Office of Admissions and Records of the Chicago Undergraduate Division will be glad to provide application blanks for admission in response to requests received by mail, by telephone, or in person.

2. Provide the Office of Admissions and Records with an official transcript of his record in high school and his record at each college or institution of higher education which he has attended since leaving high school. The applicant must assume responsibility for having these records forwarded directly to the Office of Admissions and Records, University of Illinois, Chicago Undergraduate Division, Navy Pier, Chicago 11, by an official of the school concerned.

The applicant should arrange with the registrar of his high school and of each college or university he has attended to have his transcripts forwarded to this office as soon as possible to permit an early evaluation of his credentials.

In addition, applicants who have been on active duty in the Armed Forces must also submit photostatic copies of their service separation papers.

3. Decide which college and curriculum in the University he desires to enter. To assist applicants in making this decision, the Chicago Undergraduate Division of the University offers Vocational and Educational Guidance Examinations which are followed by professional counseling. For new freshmen, these guidance examinations are a required activity of the orientation period.

However, since the time available for counseling during the orientation period is extremely limited, these examinations are now being offered several months in advance. Appointment requests for these examinations may be made through the Office of Admissions and Records. If the applicant has any question whatsoever as to the course of study he desires to pursue in college, the University strongly urges him to take these tests and receive counseling well in advance of the orientation period.

4. Complete and return the application blank.

5. When an applicant's case is complete, that is, after his completed application blank and all necessary supporting records and transcripts have been received, the case will be evaluated. If the application is approved, the applicant will be sent a permit to enter, an appointment for such placement, guidance, and motor fitness tests as may be necessary, an appointment for a physical examination, and information as to the date and place of his college meeting and of registration. If the application is not approved, the Office of Admissions and Records will send the applicant written notice of this action, explain his deficiencies, and make suggestions as to the manner in which he may remove them and qualify for admission.

6. Report to Navy Pier for physical examination, college meeting, and tests listed in paragraph 5 above, on the dates specified in the notice which the applicant has received.

7. Register, pay tuition and fees, and start classes.

Your first contact with the University is the Office of Admissions and Records.

ADMISSION REQUIREMENTS

ADMISSION WITHOUT ENTRANCE EXAMINATIONS (BY CERTIFICATE)

I. High School Graduates

The admission requirements to the University of Illinois are divided into two groups: Group A, General University Admission Requirements, which apply to every student entering the University of Illinois; and Group B, Specific Subject Requirements for admission to a particular college and/or curriculum within the University, which apply to every student entering that college and/or curriculum.

Since each student entering the University of Illinois must enroll in a particular college and/or curriculum within the University, *each student must meet both sets of admission requirements,* i.e., the General University Admission Requirements and the Specific Subject Requirements for the college and/or curriculum of his choice.

A. GENERAL UNIVERSITY ADMISSION REQUIREMENTS

These requirements must be met by all applicants. For definition of the terms used and description of the subjects acceptable in satisfaction of the requirements, please refer to C and D below.

1. Graduation from an accredited high school.

2. An applicant must be at least sixteen years of age. This requirement may be waived for a student fifteen years of age on recommendation of the dean of the college concerned, provided the student resides with his parents or guardian, or someone selected by them while attending the University.

3. Fifteen units of acceptable secondary school work distributed as follows:

   a. A minimum of nine units of work in the academic fields (English, mathematics, sciences, foreign languages, history, and social studies) including:

      (1) At least three units of English.

      (2) At least two majors (including English) and one minor selected from the list of acceptable majors and minors below.

Exception: The requirement of a second major is waived for applicants who rank in the upper half of their graduating class scholastically.

b. Six units from any of the high school subjects which are accepted by an accredited school toward its diploma and which meet University of Illinois accrediting standards.

B. COLLEGE SUBJECT REQUIREMENTS

Applicants must present credit in the subjects required for admission to the college and curriculum of their choice (see chart on page 11).

C. DEFINITIONS OF MAJORS AND MINORS

1. **Unit.** A unit is the equivalent of two high school credits, i.e., the value given to a course of study covering two semesters and including not less than the equivalent of 120 sixty-minute periods of classroom work. Two hours of work requiring little or no preparation outside the class are considered as equivalent to one hour of prepared classroom work. Fractional credits of the value of less than one-half unit will not be accepted. Not less than one unit of work will be accepted in a foreign language, elementary algebra, plane geometry, physics, chemistry, or biology.

2. **Major.** A major consists of a three-year sequence in one academic field.

3. **Minor.** A minor consists of a two-year sequence in one academic field.

Please note that the University's definition of a major and a minor may not be the same as that in use in your high school.

D. ACCEPTABLE MAJORS AND MINORS

The required majors and minors as defined may be selected only from the following five academic fields:

1. **English.** In all cases one major must be in English. Only courses in history and appreciation of literature, and in composition (including oral composition when given as a part of a basic English course) and grammar, will count toward this major. Four units in English,

while not required for any curriculum, are recommended by all the colleges.

2. **Foreign Language.** Three units in one language constitute a major. Two units in one language constitute a minor. The acceptable foreign languages are German, French, Spanish, Italian, Latin, and Greek. Less than one unit in a language is not acceptable for admission.

3. **Mathematics.** Only courses in algebra, plane geometry and spherical geometry, and trigonometry will be accepted toward a major or a minor in this subject. (General mathematics may be accepted in lieu of algebra and geometry in cases in which the content of the course is essentially the same as that ordinarily included in algebra and geometry. However, essentials of mathematics, business or shop mathematics, and commercial arithmetic are not acceptable toward a major or minor in mathematics.)

In the College of Engineering and in the chemistry and chemical engineering curricula of the College of Liberal Arts and Sciences, students who have only one unit in algebra and one unit in geometry, and who meet all other entrance requirements, may be admitted on condition that deficiencies in advanced mathematics be removed during their first year of residence. However, this will probably extend the time required for a degree.

4. **Science.** Including physics; chemistry; biology, or botany and zoology; general science, or physiology and physiography; astronomy; and geology. The three units required for a major must include at least a total of two units chosen from one or more of the following subjects: physics, chemistry, botany, and zoology. Biology may be offered in place of botany or zoology. The two units required for a minor must include at least one unit from the above subjects.

5. **Social Studies.** This field is divided into two areas:

a. History, e.g., United States, modern, ancient, and medieval, etc. Three units required for a major must include at least two units in history. The two units required for a minor must include at least one unit in history.

b. General Social Studies, e.g., civics, economics, and sociology.

Required Subjects for Specific Colleges and Curricula

Colleges	*Subjects Required for Admission*
COLLEGE OF COMMERCE AND BUSINESS ADMINISTRATION All Fields (Accountancy; Commerce and Law; Commercial Teaching; Economics of Government and Business, Public Utilities, and Transportation; Economic Theory; Finance; General Economics; Industrial Administration; Insurance; Labor Economics; Management; Marketing; Personnel Management; Secretarial Training; Statistical Economics)	English, 3 units Algebra, 1 unit Geometry, 1 unit
COLLEGE OF ENGINEERING All Curricula (Aeronautical, Agricultural, Ceramic, Civil, Electrical, General, Industrial, Mechanical, Metallurgical, Mining, Engineering Physics)	English, 3 units Algebra, 2 units Plane Geometry, 1 unit Solid Geometry, ½ unit Trigonometry, ½ unit (See paragraph 3, page 10)
Curricula in Architecture Design Option (for B.S. degree in Architecture); Construction Option (for B.S. degree in Architectural Engineering)	English, 3 units Algebra, 1½ units Geometry, 1 unit (See paragraph 3, page 10)
COLLEGE OF LIBERAL ARTS AND SCIENCES General Curriculum with majors in Bacteriology, Botany, Economics, English, French, Geography, Geology, German, History, Philosophy, Political Science, Psychology, Sociology, Spanish, Speech, Zoology Curricula preparatory to Journalism and Law Teacher Education Curricula (not requiring Chemistry, Physics, or Mathematics)	English, 3 units Language, 2 units[1] (See paragraph 2, page 10)
General Curriculum with majors in Chemistry, Physics, Mathematics, Physiology Special Curricula preparatory to Dentistry, Medicine, Veterinary Medicine Teacher Education Curricula (requiring Chemistry, Physics, and Mathematics)	English, 3 units Language, 2 units[1] (See paragraph 2, page 10) Algebra, 1 unit Geometry, 1 unit
Special Curriculum in Chemistry	English, 3 units Language, 2 units[1] (See paragraph 2, page 10) Algebra, 2 units Plane Geometry, 1 unit
Special Curriculum in Chemical Engineering	English, 3 units Language, 2 units[1] (See paragraph 2, page 10) Algebra, 2 units Plane Geometry, 1 unit Trigonometry, ½ unit
Curriculum in Elementary Education	English, 3 units
Continuation Program in Nursing	English, 3 units Language, 2 units[1] (See paragraph 2, page 10) Certification by Director, University of Illinois School of Nursing
SCHOOL OF PHYSICAL EDUCATION Curriculum for Men and Curriculum for Women	English, 3 units Written approval of the Director of Physical Education

[1] Foreign language requirement is waived for students who rank in the upper half of their high school graduating class.

For students entering the College of Engineering in September, 1954, and thereafter, the mathematics requirement for admission to full freshman standing will be as follows: algebra, two units; plane geometry, one unit; solid geometry, one-half unit; trigonometry, one-half unit. The University requires a mathematics placement examination of students presenting these credits and will adjust such students' curricula in accordance with the results of the placement examination.

Students who present only one unit in algebra and one unit in geometry, and who meet all other requirements, may be admitted on the condition that the deficiencies be removed during their first year of residence, and with the understanding they can not complete the requirements for a degree in the College of Engineering in eight semesters.

Students who do not present the four units in mathematics as specified may be admitted to full standing by passing a proficiency examination at the University which will indicate their preparation is adequate for entrance into analytical geometry.

II. Transfer Students

A. All requirements listed in Item I, page 8. *Exception:* An applicant who is transferring from an institution rated as Class "A" by the University and who is deficient in the admission requirements listed in Item I may be admitted if he presents at least thirty semester hours of credit in transfer with a 3.0 average ("C") and without any failures in any college subject. However, such applicants who desire to enter either the College of Commerce and Business Administration or the College of Engineering must present credit in the minimum mathematics required for these colleges.

B. Honorable dismissal from all institutions of higher learning previously attended, and a collegiate scholastic average of at least 3.0 ("C") in terms of the University of Illinois grading system. *Exception:* An applicant whose record at some other institution comes within either of the following classifications may enter the University only on approval of the dean of the college concerned and under the conditions imposed by him:

1. An applicant on probation at, or dropped from, another institution for poor scholarship or for disciplinary reasons. (In the latter in-

stance, he must also obtain the approval of the University Senate Committee on Student Discipline.)

2. A person whose collegiate scholastic average is less than 3.0 in terms of the University of Illinois grading system.

III. Nonresident Students

Applicants who are not residents of the state of Illinois may be admitted (if vacancies exist after all qualified resident applicants have been accommodated) provided they meet all requirements listed in Item I, page 8, and further provided that:

A. As high school graduates they ranked scholastically in the top three-quarters of their class on graduation.

B. As transfer students they present a collegiate scholastic average of at least 3.0 ("C") in terms of the University of Illinois grading system.

IV. Special Scholastic Admission Requirements

A. High school graduates who are residents of the state of Illinois and who rank in the fourth (lowest) quarter of their graduating class scholastically, if otherwise qualified, will be admitted on scholastic probation.

B. Applicants for the following special curricula must meet the scholastic minima indicated opposite each curriculum.

CURRICULUM	SCHOLASTIC REQUIREMENTS
1. Premedical	
a. High school graduates	Rank in upper half of graduating class.
b. Transfer students	3.5 collegiate average through the second semester of collegiate work. 3.75 collegiate average commencing with the fourth semester of college work.
2. Predental, Preveterinary Medicine	
a. High school graduates	Rank in upper half of graduating class.
b. Transfer students	Collegiate average of 3.5.

ADMISSION BY EXAMINATION

Applicants who do not meet the requirements for admission listed above may qualify for admission by passing one or more examinations as out-

lined below. *Exception:* This section does not apply to applicants who are deficient in the scholastic requirements outlined in Items III and IV, page 13. Scholastic deficiencies may not be removed by examination — only by an improved scholastic record.

I. Entrance Examinations

Applicants who may be classified in any of the following categories may qualify for admission by passing University of Illinois entrance examinations as indicated under each category:

A. Graduates of Unaccredited High Schools

1. Applicants who rank in the top 25 per cent of their graduating class from an unaccredited secondary school which offers four years of instruction may qualify by passing an entrance examination in English composition and rhetoric and such other entrance examinations in high school subjects as may be necessary to complete admission requirements.

2. Applicants who are graduates of unaccredited secondary schools and rank below the top 25 per cent of their graduating class may qualify by passing entrance examinations for a minimum of fifteen units of secondary credit, including all courses necessary to meet University and specific college admission requirements.

B. Applicants who have attended an accredited high school, but who have not been graduated, may qualify by passing an entrance examination in English composition and rhetoric and additional entrance examinations for a total of *at least* four units of work in subjects to be designated by the University.

C. Applicants who have not completed any secondary school work may qualify by passing University of Illinois entrance examinations in all high school subjects necessary to meet general University and specific college admission requirements.

D. Applicants who do not meet University admission requirements with respect to total units of credit, total academic units, major and minors, or subjects required for admission to the college of the applicants' choice may qualify by passing University of Illinois entrance examinations in the subjects in which they are deficient.

These entrance examinations will be given three times a year, usually

in September, January, and June. Applications to take these examinations must be filed in advance in the Office of Admissions and Records.

II. General Educational Development Tests

Veterans of active duty with the United States Armed Forces or with the United States Maritime Service and adult non-veterans (non-veterans twenty-one years of age or older) may qualify for admission to the University by passing the United States Armed Forces Institute General Educational Development Tests under the following conditions:

A. Applicants seeking admission to the College of Liberal Arts and Sciences may qualify if their G.E.D. test scores are sufficiently high to entitle them to a scholastic rank equivalent to that of a student who has been graduated in the upper half of his class in an accredited secondary school. Applicants, whose G.E.D. scores are passing but below minimum required for upper-half classification scholastically, may qualify if they present credit from accredited sources in two successive years of an acceptable foreign language. Applicants desiring to enter specialized curricula in the College of Liberal Arts and Sciences for which mathematics is required (see page 11) may not qualify for such curricula by G.E.D. tests alone, but must present credit from accredited sources in elementary algebra and plane geometry.

B. Applicants seeking admission to the College of Commerce and Business Administration or the College of Engineering may qualify by passing the G.E.D. tests and presenting credit from accredited sources in the required mathematics.

C. Applicants seeking admission to the School of Physical Education may qualify by passing the G.E.D. tests and securing the approval of the Director of Physical Education.

Tuition and Fees

Semester Fees

Tuition and fees are due and payable in full when the student registers.

Tuition. Illinois residents (except those holding scholarships) registering in nine semester hours or more pay tuition of.....$ 50.00

Nonresidents registering in nine semester hours or more pay tuition of 160.00

Students taking eight semester hours or less pay $4 per semester hour if residents of Illinois, or $11 per semester hour if nonresidents.

Hospital and Medical Service Fee. All students registering in six semester hours or more pay as insurance for hospital and medical service a fee of..... 5.00

Laboratory, Library, and Supply Fee. All students registering in nine semester hours or more pay a laboratory, library, and supply fee of..... 11.00

Student Activities Fee. All students registering in six semester hours or more pay a student activities fee of..... 6.00

Deposits. Each student must make a deposit of $5 at the time of his first registration. An additional deposit of $10 ($15 in all) is required of students withdrawing military equipment. Chargeable against these deposits are such items as unreturned towels and locks, lost library books, library fines, shortages in laboratory, military, and other equipment, etc. Whenever the amount of the $5 deposit falls below $2.50 or the amount of the $15 deposit falls below $12.50, the student will be required immediately by additional deposit to bring the total up to $5 and $15, respectively. Any balance in deposit will be returned to the student in case he officially withdraws from the University. This refund of deposit will be made after the close of registration for the next regular semester following the student's withdrawal. The $10 military deposit will be returned to the student, upon receipt of the military equipment, at the end of each school year.

Identification Card. Each student, on payment of tuition and fees each semester, is given an identification card for use in obtaining loans of library books, locks, towels, and other equipment.

Summer Session Fees

Tuition and fees are due and payable in full when the student registers.

Tuition. Illinois residents (except those holding scholarships) registering in five semester hours or more pay tuition of.....$25.00

Nonresidents registering in five semester hours or more pay tuition of 80.00

Students taking four semester hours or less pay $4 per semester hour if residents of Illinois, or $11 per semester hour if non-residents.

Hospital and Medical Service Fee. All students registering in four semester hours or more pay as insurance for hospital and medical service a fee of 2.50

Laboratory, Library, and Supply Fee. All students registering in five semester hours or more pay a laboratory, library, and supply fee of 5.50

Students taking less than this amount of instruction pay $2.25 for the summer session.

Student Activities Fee. All students registering in four semester hours or more pay a student activities fee of 3.00

Refunds of Tuition and Fees

In case a student withdraws from the University[1] during the first ten days of instruction, the total amount of his tuition and fees will be refunded. After ten days and before the middle of the semester, a rebate of one-half the tuition and fees will be made. After the middle of the semester, no rebate will be allowed. In the summer term, the total amount of the tuition and fees paid will be refunded if withdrawal occurs within the first five days; one-half the amount after the first five days but within the first four weeks; and nothing after the beginning of the fifth week. If a student withdraws from one or more courses thereby reducing his study load to eight or less semester hours in the regular semester or four or less hours in the summer session, a pro rata refund of tuition and fees will be made according to the rebate schedule, provided that such a reduction of study load occurs during the full rebate period.

Miscellaneous Fees

Service Charge for Deferred Fees. A service charge of ten per cent of the amount of fees deferred, but not to exceed $3 a semester, is assessed for the privilege of deferring fees, and this charge must be paid on the

[1] Students leaving the University before the end of a semester or session should initiate withdrawal papers at the office of the dean of their college. Failure to do so will result in the student being dropped for poor scholarship at the end of the semester.

day of registration. If deferred fees are paid within ten days after registration, the service charge is refunded *except* that a minimum service charge of $1 is retained by the University in all cases. The general deposit of $5 (if this deposit has not previously been paid), the service charge, and all charges from previous semesters must be paid on the day of registration. Arrangements for deferred fees are made directly with the cashier.

Change Fee. For every change of program approved later than noon of the second Monday following registration the fee is..... $1.00

Transcript Fee. Each student who has paid all his University fees is entitled to receive, without charge, one transcript of his record. For each additional transcript the fee is..... 0.50

Late Registration Fee. Former students who register after the regular registration days in either semester pay a late registration fee of 5.00

Special Examination Fee. For any special examination to remove a failure the fee is..... 5.00

Fee to Audit Courses. Persons not connected with the University who attend classes as listeners pay for each course..... 7.50

Veterans' Information

The Chicago Undergraduate Division has been approved to offer training under the following veterans' educational benefits acts: Public Law 346, the World War II G.I. Bill; Public Law 550, the "Korean G.I. Bill"; and Public Laws 16 and 894, the Vocational Rehabilitation Acts. Questions concerning benefits under these laws may be referred to the Veterans Section, Office of Admissions and Records.

The University of Illinois has established the Office of Veterans Counselor in the Dean of Men's office, Room 313. As a collateral duty, the Dean of Men gives special attention to the particular problems of veterans.

I. Authorization

To enroll under one of the above benefits at the Chicago Undergraduate Division, an applicant, in addition to applying for admission to this Division, must take the following steps:

A. Determine the course in which he will register and the highest degree toward which he plans to work. If there is any doubt as to the final vocational objective or the course to follow to reach it, some type of educational and vocational counseling should be received before completing application to the Veterans Administration.

B. Make application to the Veterans Administration, 2030 West Taylor Street, Chicago, for the proper training authorization. A copy of service separation papers must accompany this application. Applications should be filed as early as possible, and not later than the first day of classes.

1. Applications for Public Laws 346, 16, and 894, must show the exact college and curriculum in which the veteran will register.

2. Applications for Public Law 550 need show as the goal only the highest degree desired, e.g., bachelor's degree, master's degree. Titles such as Bachelor of Science, Master of Arts, etc., should not be specified unless the applicant is certain that is the degree awarded in his course.

C. The training Certificate received from the Veterans Administration should be brought to the University on the day of registration for classes. It will not be accepted before that time. Certificates received after the beginning of classes should be turned in at once to the Veterans Section, Office of Admissions and Records, Room 15.

II. Transfers Under the G.I. Bill

Veterans transferring from another school under the G.I. Bill must obtain a notice of interruption from that school (P.L. 346 Form 7-1905e or P.L. 550 Form 7-1995) and submit it to the Veterans Administration when requesting a supplemental training certificate for this University.

A. Applications for transfer under P.L. 346 must reach the Veterans Administration before the veteran interrupts his course at his previous school.

B. Veterans transferring between divisions of the University of Illinois must follow the above procedure for changing schools if they are authorized under P.L. 550. Veterans under P.L. 346 may use the same Certificate if transferring between the Chicago Undergraduate Division and the Urbana campus, provided they do not change their college or curriculum and will register the succeeding semester.

III. Choice of Course

Veterans applying for any educational benefits should be extremely cautious in choosing their courses. Once a particular program is authorized by the Veterans Administration, the veteran may not alter that program without jeopardizing his benefits, particularly if he fails to do satisfactory work in the original course. If assistance in choosing the correct course is desired, the facilities of the University Student Counseling Bureau are available at all times (see page 22). The Veterans Administration also will provide free counseling for any veteran.

IV. Special Provisions

A. Charges for Tuition and Fees

1. Public Law 550 requires each veteran to pay the costs of his education out of his monthly allowance. The fees listed on page 15 are payable at the time of registration for classes. The Veterans Administration will mail the first allotment check about six weeks after a veteran enters training.

2. Veterans under Public Law 346 who present a valid Certificate of Eligibilty, V.A. Form 7-1953, at the time of registration will be required to pay only the $5 general deposit fee. Veterans not having the Certificate at that time will be required to pay all fees, but will receive a refund when the authorization is presented to the University. This provision also applies to veterans enrolling under Public Law 16 or 894.

B. Attendance

The University of Illinois is required by the Veterans Administration to submit a monthly attendance report for each veteran enrolled under P.L. 550.

V. Public Laws 16 and 894

Students receiving educational benefits under either of the federal Vocational Rehabilitation Acts should be certain that there is an authorization on file for them at the University by the time they are to register for classes. Early application for training should be filed with the Veterans Administration Training Officer.

VI. Military Scholarships

Any person who served in the armed forces during World War I or any time between September 16, 1940, and the official termination of the present national emergency and received an honorable discharge may qualify for a four-year tuition scholarship if he was a resident of Illinois or a student in the University of Illinois at the time of entering service. No examination or minimum grade average is required. Information and application blanks are available from the Office of Admissions and Records, Room 15, Window E. The Military Scholarship may not be used during any period when the veteran is receiving financial aid for his education from the federal government.

VII. Credit for Military Service

Through the Examiner and Recorder of the Chicago Undergraduate Division, the veteran can ascertain to what extent he may meet entrance requirements by credit for service or for courses taken through the United States Armed Forces Institute. Credit in military science, physical education, and hygiene will be granted to any veteran, honorably discharged, who presents evidence that he has completed the basic training program in the Army, Navy, Marine Corps, or Coast Guard. Credit for work taken in college training programs in technical schools, and in courses pursued while the veteran was in service, may be transferred upon the basis of evaluation by the Examiner and Recorder.

Scholarships

Several types of scholarships are available to undergraduate students in the University of Illinois. Some of these are the County Scholarships awarded on the basis of a competitive examination administered each April by the County Superintendents of Schools, the State Military Scholarships, the General Assembly Scholarships, and, in addition, a number of scholarships awarded by the University Scholarship Committee each spring for the following school year. All the scholarships offered, and the individual requirements, are listed in an information folder available upon request from the Office of Admissions and Records at Navy Pier.

Undergraduate scholarships usually cover tuition charges only. Although some are available only to students in a specific course, the majority

may be used in any of the colleges. Students now enrolled may apply for a scholarship for any year; a few scholarships, however, may be awarded only to applicants without college experience. Information regarding scholarships may be obtained from the Office of Admissions and Records, Window E, Room 15, or from the Office of the Dean of Students.

Selective Service Deferment

The Office of Admissions and Records will supply required certifications for students who wish to apply for educational deferments under the regulations of the Selective Service System. Application should be made at Window E, Room 15, at the time the student completes his classification questionnaire. Information concerning educational deferments also is available from this office.

Student Welfare

The University's interest in the individual student extends beyond the classroom to include each student's personal adjustment to college life. To this end, the University provides a broad program of educational, vocational, and personal counseling, instruction in healthful living, and extracurricular activities, both social and cultural.

Aid in adjustment to college life begins before the student enrolls at the Chicago Undergraduate Division, with the services of the Student Counseling Bureau available to prospective students seeking help in planning their college careers. New students have an opportunity to meet the deans and directors at a special meeting at the start of each semester.

Student Counseling Bureau

The purpose of the Student Counseling Bureau is to help prospective, present, and former students in forming college and vocational plans, and in making the fullest use of resources of the University for meeting their individual needs.

High school seniors in the second semester of their senior program, as well as high school graduates and entering freshmen, are urged to take

advantage of aptitude testing and of individual counseling *before* entering the University. These services are available if requested through high school counselors and the Office of Admissions and Records.

The Bureau's facilities are available at all times to students at the Undergraduate Division.

Testing service of the Student Counseling Bureau.

On the basis of information obtained from interviews and scientific tests of aptitude, achievement, interest, and personality, these counselors help the student answer questions such as: Do I have the necessary aptitudes, interest, and personality characteristics for the course of study and for the vocation I am considering? What is the probable demand for workers in the vocation I am planning to enter? What grades should I expect to earn at the University? How can I improve my concentration, and speed up my reading ability?

In addition to such vocational and educational questions, the Bureau also provides counseling services for all types of personal and psychological questions such as overcoming fear of examinations, speech problems, and lack of friends, and needs for increased personal effectiveness. All the following services are important aspects of the Student Counseling Bureau's work with students:

Freshman Guidance Testing
Individual Testing
Reading and Study Skills Counseling
Occupational Information
Selection of College Majors
Personal Problems Counseling

University students can make an appointment for the suggested types of services at the Bureau's reception desk in Room 300. High school seniors and graduates should make requests for services through the Office of Admissions and Records.

Counseling facilities of the offices of the Dean of Students, the Dean of Men, the Dean of Women, and the Student Counseling Bureau are available to students at all times during their college work at the Chicago Undergraduate Division. Students are urged to discuss specific educational problems with their instructors. Members of the instructional staff hold weekly office hours for conferences with individual students.

The Speech Clinic

The services of the Speech Clinic are available to those students who want assistance in correcting speech difficulties and to students who desire to increase their effectiveness and fluency in talking to others. Students who stutter, lisp, have foreign accents, hearing deficiencies, or voice problems are aided by the clinic. The clinic also assists students with the problems that sometimes arise in appearing and talking before groups. Students planning theatrical or teaching careers are aided in meeting professional speech requirements.

Dean of Students

The Dean of Students is in charge of most matters of student welfare and extracurricular activities. As part of his organization the Dean of Men, the Dean of Women, and their assistants are general advisers to whom students may go for assistance and advice. The offices of these advisers are open throughout the day. Any student may go to them, and inquiries from parents and guardians are welcomed. Details of these services are given in the following sections.

In addition, the Dean of Students is the administrative officer responsible for all extracurricular activities and is charged with the coordination of the extracurricular programs of the recognized student clubs and organizations. He is also adviser to foreign students at the Chicago Undergraduate Division.

In connection with the responsibility for student welfare, the Dean of Students is authorized to attend sessions of the Disciplinary Committee, but has no vote.

Dean of Men

The Office of the Dean of Men is organized for the primary purpose of aiding men students. The work of the Dean of Men is in counseling students and advising them on any matters which they wish to bring to him. He is available for individual conferences with students daily. The Dean of Men takes an active part in student extracurricular affairs through his membership on the Committee on Student Affairs, through his chairmanship of the Administrative Committee on Finance and Audit for Student Organizations, and as secretary of the Student Organizations Fund. He also serves as adviser to Phi Eta Sigma, national scholastic honorary for first-year men students, and as a vice-president for the Parents Association.

The Hospital and Medical Service plan for the students and the voluntary plan for the staff are under the supervision of the Dean of Men. Attendance records for both veteran and non-veteran students are maintained by the Office of the Dean of Men.

Loan Funds

Loan funds have been established for the benefit of worthy students of the University who are in need of financial aid. They are of two general classes: (1) emergency loan funds, and (2) long term or regular loan funds. Most of these funds have special qualifications which must be met by applicants.

Detailed information regarding loan funds and application blanks may be obtained from the Office of the Dean of Men.

Student Employment

For students who find it necessary to earn a portion of their expenses, the Student Employment Division in the Office of the Dean of Men provides information and assistance to needy students desiring part-time jobs, both in University offices and in industry and business in the Chicago area. Applications for part-time jobs should be filed with the Student Employment Manager, Room 313.

The student who expects to be employed will find it to his advantage to arrange his class schedules, at the time of registration, so that consecutive hours are free each day. Employment for the first-year student should be a matter of necessity rather than choice.

Hospital and Medical Service

A Hospital and Medical Service fee of five dollars is charged each student at the time of registration to provide limited care in an approved hospital for a period not to exceed twenty-one days in any semester. In addition, while confined to a hospital or to home, a limited payment is made toward the attending physician's charges, usually sufficient in the case of minor illnesses to give almost complete protection. There is also an allowance for laboratory tests, anesthetic and administration thereof, use of operating room, medicine, drugs, dressings, and X-rays. The Hospital and Medical Service plan is under the supervision of the Dean of Men. All questions pertaining to this insurance should be directed to the Dean of Men, University of Illinois, Navy Pier, Chicago 11, Illinois.

Note: A student who presents evidence of participation in any other group insurance system providing the same benefits as those covered by the University fee may petition, through the Office of the Dean of Men *during the first ten days of instruction,* for a refund of this fee.

Dean of Women

The Office of the Dean of Women is the clearing place for the problems of women students. Students are urged to come with questions that inevitably arise — social, personal, academic, or financial.

In addition to the friendly, sympathetic counseling of women students, the Dean of Women serves as the adviser to women's organizations at the Chicago Undergraduate Division; as sponsor of Alpha Lambda Delta, national scholastic honorary for freshman women, Activities Honorary Society, and University Dance Committee.

All student social events are coordinated and unified through her office in her capacity as chairman of the Administrative Committee on Social Events, Calendar, and Recreation. She offers helpful assistance to student groups in organizing dances, entertainments, special events, and other all-University functions.

Health Service

The University maintains a Student Health Service to promote better physical and mental health among the students at the Chicago Undergraduate Division. Physical examinations, given by the staff of the University Health Service, are required of all students prior to the time

The Health Service gives physical examinations and emergency treatment.

of their first registration and each year thereafter. Chest X-rays are required as part of the physical examination. Immunizing inoculations for smallpox, tetanus, diphtheria, influenza, and typhoid fever are available to students without charge.

The staff of five physicians instruct classes in hygiene and sanitation. As the functions of the Health Service are primarily educational and preventive, its staff does not assume responsibility for the care of students beyond giving medical advice, emergency treatment, and vaccinations. It is emphasized that advice to students contemplates a real concern for the best treatment whenever indicated and that the discussion of student welfare problems with the staff of the Student Health Service is encouraged. Members of the staff are available at all times for conferences with the students about individual health problems. The Health Service is located on the third floor at the east end of the Pier. The office is open from 8 a.m. to 5 p.m. daily and during vacation periods.

Spring Carnival is a highlight of the extracurricular calendar.

Extracurricular Activities

Student extracurricular activities are recognized as an important part of the student's life and are encouraged in part as an adjunct to curricular courses; to develop individual talents in speech, music, drama, journalism, radio production, etc.; and to develop qualities of leadership, personality, and character. Many student clubs and organizations are active on the campus. These groups sponsor varied social and cultural activities for the benefit of the entire student body. All questions pertaining to extracurricular activities should be directed to the Dean of Students, Room 313.

The Committee on Student Affairs is an official body appointed to assist the Dean of Students in the development and supervision of student extracurricular and student government activities.

The student government organization, the Student Congress, is comprised of four officers and fourteen representatives selected by vote of the entire student body at general elections each year. Officers of the Congress serve with the Committee on Student Affairs.

Joint student-faculty administrative committees supervise the operating policies of student organizations. These committees are composed of a faculty representative of the Committee on Student Affairs and two members of the Student Congress.

Students are provided an opportunity for experience in journalism through the weekly student newspaper, the *Pier Illini,* written and edited entirely by students. Engineering students edit the Chicago Undergraduate Division section of the *Illinois Technograph,* the University of Illinois engineering periodical.

Supplementing classroom work, three language clubs, the Pershing Rifles, the Commerce Club, the Veterans-Illini Club, the International Relations Club, and the Cadet Association provide cultural programs for the students. Engineering, architecture, chemistry, and premedical students may take part in the activities of their respective professional societies, several of which are affiliated with national professional organizations.

Students interested in music and drama may seek membership in the University Band, the University Choir, the Music Appreciation Club, the Pier Playhouse, or the Radio Club. Extracurricular organizations in athletics and physical education include the Varsity Lettermen's Club, Orchesis, the modern dance organization, the Co-Recreational Association, and the Women's Athletic Association.

All-University dances are sponsored by the University dance committee. Other varied student interests include a chess club, a photography club, an amateur radio club, and an activities honorary society.

Honorary scholastic societies include Alpha Lambda Delta for freshman women and Phi Eta Sigma for freshman men.

Debating

The forensics program at the Chicago Undergraduate Division provides an opportunity for students to gain experience in debating and discussion. All students, including those without previous experience, may take part in the forensics activities.

The debating program begins each fall with an instructional program for newcomers and an intramural tournament. From mid-November to mid-April a full schedule of intercollegiate competition is maintained. In addition to Chicago-area colleges and universities which come to the

Chicago Undergraduate Division for debates, guest teams from outside the city have included colleges and universities from Florida, Texas, Iowa, Michigan, Missouri, Ohio, and New York. Debaters from Navy Pier also attend tournaments in Illinois and nearby states where they meet debaters from schools throughout the country.

Since its organization in 1947, the debate team has engaged in both junior and senior college competition. It has won the Chicago Area, the state, and the regional championships, and in 1952, 1953, and 1954 represented the East Central State area in the national championship tournament at West Point, New York.

Problems of national and international interest are the topics for public discussion and panel presentations, both on and off campus. These programs, usually followed by audience participation, are sometimes joint presentations with other colleges and universities. Chicago Undergraduate Division speakers are often featured on adult forum programs.

Debating and the forum discussions are under the supervision of the Forensic Council, a faculty committee appointed by the Dean of the Chicago Undergraduate Division. Members of the faculty of the speech department work directly with student participants.

Football is one of ten intercollegiate sports in which teams participate.

Athletics

The Chicago Undergraduate Division participates in ten varsity sports — football, basketball, baseball, cross-country, track, wrestling, swimming, gymnastics, tennis, and golf. In accordance with a special ruling, freshmen in good standing are allowed to participate in varsity sports.

A special feature is the extensive intramural program in which students can elect to take part in wrestling, badminton, table-tennis, volleyball, basketball, gymnastics, handball, weight lifting, tennis, track, and softball. The intramural and intercollegiate programs are under the supervision of an athletic sub-committee of student and faculty representatives. Both programs are financed through funds from student activities fees.

The Chicago Undergraduate Division Gymnasium, adjacent to the west end of Navy Pier, is the center of the intramural and physical education programs. Basketball games, wrestling meets, and gymnastics meets are also held in the gymnasium which has floor space for eight full-size basketball courts.

A staff of sixteen coaches directs the Chicago Undergraduate Division athletic activities. Varsity letter awards are made to athletes who meet the participation requirements of intercollegiate competition, to sophomore managers, and to sophomore cheerleaders.

University Services

University Library

The library of the Chicago Undergraduate Division is outstanding among the newer college libraries of the nation. Although only eight years old, it contains nearly 68,000 volumes, all of which have been carefully chosen with the institution's undergraduate curricula in mind, as well as the general and recreational interests of students and faculty. Orders for new books are being placed constantly, so that it is expected that the library will contain 80,000 selected volumes within the next few years.

While no attempt will ever be made to duplicate scholarly research facilities already available in the city, strong emphasis is placed on general reference, library instruction, and readers' advisory service, with close liaison maintained with the teaching program and student activities.

An exceptional collection of general and special encyclopedias, atlases, bibliographies, dictionaries, handbooks, yearbooks, and directories (6,000 volumes) has been assembled. A complete dictionary catalog is provided and thirty periodical indexing services are available. The subscription list includes nearly 600 magazines and journals. Twenty-year back files of 300 particularly useful periodicals have already been bound for permanent reference use and are available on open shelves. An extensive vertical-file pamphlet collection, excellent microfilm reading facilities, vocational guidance materials, and college catalogs are also provided.

The Library has three service areas. The open-shelf Main Reading Room is located on the second floor at the east end of the Pier. It offers liberal reference and circulation facilities, in addition to well-lighted study space for 700 students. The Reserve Book Station, located near the street car line, makes assigned reading materials conveniently available. The Fine Arts Reading Room (Room 246) offers special facilities in architecture and art. The Library staff of twenty-six includes twelve trained librarians, with academic rank, and fourteen full-time clerks. Library hours are 8:30 a.m. to 5 p.m., Monday through Friday.

University Bookstore

The University Bookstore is operated by the University to provide faculty approved texts and supplies as required by the various courses at the Chicago Undergraduate Division.

The Bookstore is located at Room 87. It is open daily, Monday through Friday, from 8:30 a.m. to 4:30 p.m. During the registration period, the Bookstore is open from 8:30 a.m. to 6 p.m.

Food Service

The University operates non-profit food service facilities for the convenience of students, faculty, and staff. The student cafeteria serves well-balanced, low-cost lunches and breakfasts. The cafeteria is located at the east end of the Pier. A soda fountain, serving sandwiches and beverages, is operated in connection with the cafeteria.

A popular student spot between classes is the snack bar located at the entrance to the Pier, adjacent to the reception lounge. In addition, a dining room at the east end of the Pier offers cafeteria-style service to members of the faculty and staff.

The Snack Bar is a popular spot between classes.

Courses Required of All Students

The following course requirements must be met by all students registered at the Chicago Undergraduate Division. These subjects are to be begun in the first semester of the freshman year, except as otherwise provided, and are to be continued until these requirements are completed.

1. Men and women entering the University with less than sixty semester hours of credit are required to secure four semesters of credit in physical education including the amount transferred. Those entering with sixty semester hours or more are exempt from the requirement in physical education.

2. Hygiene is required of all students entering the University of Illinois with less than thirty semester hours of credit irrespective of the college in which they enter unless they have previously had equivalent credit in this course. Students entering with thirty semester hours or more are exempt from this requirement.

3. Two semesters of rhetoric (Rhetoric 101 and 102) are required. All students entering the University as freshmen direct from secondary schools are required to take a placement test in rhetoric. A satisfactory proficiency in the use of written English is a requirement for all under-

graduate degrees. Students who receive grades of "C" or "D" in Rhetoric 102, or its equivalent, are required to take an English qualifying examination before graduating. Those who fail to pass the qualifying examination are required to pass an extra semester course in rhetoric (Rhetoric 200).

The Grading System

The following grades are given in the University of Illinois: A — Excellent, B — Good, C — Fair, D — Poor (lowest passing grade), E — Failure.

The University does not use plus or minus signs with the letter grades. Further, there are no numerical equivalents.

A student with a failure may have a special examination on the recommendation of the head of the department approved by the dean of his college, and on payment of a fee of $5, or he may take courses in sequence, with the approval of the department.

Other symbols in use are:

W — Withdrawn from the course without penalty.

Ex — Absent from the final examination for reasons acceptable to the dean of the college concerned and hence "Excused." (Entitles the student to an examination later without fee, but becomes a failure if not removed during the first semester that the student completes in residence following the giving of the grade of "Ex.")

Rep — Replaces grade of "Ex" when course in which "Ex" grade was received is repeated by the student. A student may earn credit in a course in which he received an "Ab" grade by taking a special examination (fee $5) during the next semester in which he is in residence, but not to be taken within ten days of the final examination period.

Inc — The grade of "Incomplete" is no longer authorized except in the required work in physical education. Except in this department instructors are required to assign a definite grade representing both the quality and the quantity of the work accomplished.

Grade-Point Average

In computing the grade-point average, weighted values are given to the grades as follows: A = 5 grade points; B = 4; C = 3; D = 2; E = 1;

Ab = 1. To compute the grade-point average, multiply the number of hours of each grade by the weight, add the products, and divide by the number of hours. Thus, if you earn three hours of A, six of B, three of C, two of D, and four of E, the computation of your grade-point average is as follows:

Grade	*Hours*	*Weight*	*Grade Points*	
A	3	5	15	
B	6	4	24	
C	3	3	9	
D	2	2	4	
E	4	1	4	
	18		56	$\frac{56}{18} = 3.111$

Your grade-point average is 3.111.

College of Commerce and Business Administration

Through knowledge of modern business practices and the fundamental principles on which economic systems operate, the College of Commerce and Business Administration seeks to develop in students the intellectual powers necessary for administrative careers. For this purpose it offers a unified program of basic studies for freshmen and sophomores. Though the factual contents of many of the courses are directly useful in specific vocations, students should expect to serve an apprenticeship in the fields they enter after graduation from this college if they wish to prepare themselves for higher positions.

While concentrating in a special field, students are encouraged to elect courses offered in other colleges of the University and to secure as liberal an education as possible to avoid the narrowing effects of early specialization.

The courses required and available in the first two years in this college are primarily organized to serve as a foundation for building the study in a field of concentration in the junior and senior years.

Students who have completed this two-year program with a satisfactory scholastic record are qualified for admission to the Upper Division of the College of Commerce and Business Administration or for admission to the College of Education, the College of Law, or the School of Journalism and Communications. Students transferring to other colleges after completing only the two-year program of the College of Commerce

receive their degrees not from the College of Commerce and Business Administration, but from the college to which they transfer on completing the requirements of that college.

Another group of students has not been forgotten. This group comprises those who will not be able to attend school for more than one or two years. The program is so arranged that the maximum benefit of basic business knowledge can be obtained in that more limited period.

Summary of Requirements for Graduation

A candidate for the degree of Bachelor of Science in a field of the College of Commerce and Business Administration must:

1. Fulfill general University requirements as to registration, residence, scholarship, and fees.

2. Have a total of 130 credit hours of which not less than sixty credit hours must be in Accountancy, Business Law, Economics, Management, and Marketing. Secretarial Training courses may be included in the fields of Commercial Teaching and Secretarial Training. In Commercial Teaching and Commerce and Law only forty-five such hours are required, while in Industrial Administration the number of such hours is fifty.

3. Complete courses included in University requirements, College General Education requirements, and College General Business requirements. (See pages 38 and 39.)

4. Complete the requirements for one of the fields of concentration. (See page 39.)

5. Have a minimum average of 3.0 for all courses counted toward graduation.

Electives

Whenever a program for any session includes all possible required courses at that time, and it seems desirable to add other courses to make a reasonable number of hours, certain electives are recommended. Prerequisites for these electives should be observed carefully. These electives should be directed toward requirements in the Upper Division. They include management, marketing, anthropology, history, philosophy, po-

Students use business machines in statistics classes.

litical science, psychology, and sociology, as well as additional courses in mathematics, science, English, or foreign language. Any advice desired on these electives may be obtained at the office of the dean or from the adviser at the time of registration.

Commerce and Law

Students interested in obtaining a legal education may take their prelegal work in the College of Commerce and Business Administration. This preparation should be of particular interest to students looking forward to some phase of the legal practice involving business or corporation law. The general requirements are the same as those for all Commerce students shown on page 38. The third year includes requirements of special value to the pre-law student. The courses involved here include commerce courses as well as those in political science, history, and philosophy.

When a student has completed 100 hours in the College of Commerce and Business Administration and thirty hours in the College of Law,

including all required courses and all other graduation requirements, he will be granted the degree of Bachelor of Science in Commerce and Law. Upon completion of the requirements of the two remaining years in the College of Law, the law degree will be granted.

Commercial Teaching

Since there are certain state requirements for certification of teachers in Illinois high schools, a special program to meet these requirements for commercial teachers has been established in the College of Commerce and Business Administration. The approved program for this field for the first two years is shown on page 40.

Prejournalism

Students desiring to enter the School of Journalism and Communications may do so after the completion of two years with proper grade average in the College of Commerce and Business Administration. Those interested in advertising and other business phases of journalism may find consideration of this program profitable. The general program for this purpose is the same as that shown below.

Requirements for All Commerce Students

(Except Commercial Teaching)

I. University Requirements. *All available at the Chicago Undergraduate Division.*	CREDIT HOURS	NORMAL SEMESTER
Hygiene	2	2
Military[1]	4	1, 2, 3, 4
Physical Education	4	1, 2, 3, 4
Rhetoric 100,[2] 101, 102	6	1, 2, (3)
Total	16	
II. College General Education Requirements. *All available at the Chicago Undergraduate Division.*		
Economics 136—Economic History of the United States, or Economics 138—Introduction to the Economic History of Modern Europe, or Geography 105—Introductory Economic Geography	3[3]	1
Economics 100—Introduction to Business (*strongly recommended*)	(3)[3]	2
Literature or Language[4]	6	1, 2, 3 or 4
Mathematics 103—Introduction to College Algebra and Mathematics 112—College Algebra[5]	0 to 6	1, 2
Rhetoric 151—Business Letter Writing	3	3 or 4
Science or Advanced Mathematics[6]	4	1 or 2
Secondary List (Anthropology, History, Philosophy, Political Science, Psychology, or Sociology)	6	3 or 4
Speech 101—Principles of Effective Speaking	3	1, 2, 3 or 4
Additional hours in Language, Literature, Advanced Mathematics, Science, or the Secondary List to bring the total of this group, excluding Economics 100, to 39 credit hours	0 to 17	
Total	39	

III. College General Business Education Requirements. *All except those shown with an asterisk are available at the Chicago Undergraduate Division.*

Accountancy 101 or 102—Principles of Accounting	3 or 2	1
Accountancy 105—Accounting Procedure	3	2
Accountancy 106—Elementary Cost Accounting (*recommended*), or Accountancy 108—Intermediate Accounting	3	3
Business Law 100—Basic Principles of Business Law	3	4
Economics 102, 103—Principles of Economics	6	3, 4
Economics 170—Elements of Statistics	3	4
Economics 250—Money, Credit, and Banking*	3	
Economics 254—Business Finance*	3	
Management 101—Industrial Organization and Management	3	4
Marketing 101—Principles of Marketing	3	4
Economics—electives*	6	
Total	39 or 38	

IV. Field of Concentration Requirements and Free Electives.
Sufficient credit hours must be taken here to make a grand total of 130 credit hours. *None of the required courses in the fields of concentration are available at the Chicago Undergraduate Division.*

Fields of Concentration:
- Accountancy
- Commerce and Law
- Commercial Teaching (special program)
- Economics of Government and Business, Public Utilities, and Transportation
- Economic Theory
- Finance
- General Economics (eight sub-fields)
- Industrial Administration
- Insurance (two sub-fields)
- Labor Economics
- Management
- Marketing (nine sub-fields)
- Personnel Management (three sub-fields)
- Secretarial Training
- Statistical Economics (six sub-fields)

Further information about any of these fields of concentration or any other academic questions arising in connection with any of the above material should be directed to the Associate Dean in charge of the College of Commerce and Business Administration, Room 27.

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[1] Not required if first sixty credit hours are taken at the Chicago Undergraduate Division.

[2] Not required unless placement examination so indicates.

[3] For freshmen only. Students with thirty credit hours or more should not take this course.

[4] If literature is elected, six hours of American or English literature will satisfy the minimum requirement. If language is elected, it must be a modern foreign language and the equivalent of four semesters when pursued in college must be taken to satisfy graduation requirements.

[5] A student should always be guided by his placement examination but, in general, one who has one year of high school algebra must take Mathematics 103 followed by Mathematics 112; one who has one and one-half years of high school algebra must take Mathematics 112; and one who has two years of high school algebra need not take any college algebra unless he wishes.

[6] If science is elected it may be any laboratory science (geography is not included here). If mathematics is elected it may be any course in advance of college algebra, trigonometry included.

Curriculum Preparatory to Teaching Commercial Subjects

FIRST YEAR FIRST SEMESTER	17 HOURS
Accy. 101—Principles of Accounting	3
Biology 101—Fundamentals of Biology	4
Econ. 136—American Economic History, or Econ. 138—European Economic History	3
Math. 112—College Algebra[1]	3
Rhet. 101—Rhetoric and Composition	3
Physical Education	1

SECOND SEMESTER	18 HOURS
Accy. 105—Accounting Procedure	3
Biology (choice)	4
Econ. 100—Introduction to Business	3
Ed. 101—The Nature of the Teaching Profession	2
Hygiene 101—Personal and Environmental Hygiene, or Hygiene 104—Personal and Community Health	2
Rhet. 102—Rhetoric and Composition	3
Physical Education	1

SECOND YEAR FIRST SEMESTER	16 HOURS
Accy. 106—Elementary Cost Accounting	3
Econ. 102—Principles of Economics	3
Geog. 105—Introduction to Economic Geography	3
Sociol. 100—Principles of Sociology	3
Speech 101—Principles of Effective Speaking	3
Physical Education	1

SECOND SEMESTER	17 HOURS
Econ. 103—Principles of Economics	3
Hist. 152—History of the United States	3
Mktg. 101—Principles of Marketing	3
Psych. 100—Introduction to Psychology	4
Elective[2]	3
Physical Education	1

College of Engineering

To prepare men for professional work in engineering and architecture and for responsible positions of a technical and semi-technical character in industry, commerce, and government, the College of Engineering at the Chicago Undergraduate Division provides training in the mathematical and physical sciences and their applications to the design, construction, and operation of industrial plants, buildings and homes, and public and private works of all kinds.

The curricula in this college, though widely varied and specialized, are built on a general foundation of scientific facts and theories applicable to many different fields. Work in the classrooms, laboratories, shops, and drafting rooms is correlated by practical problems which the students solve by methods similar to those of practicing architects and engineers. The courses in architecture in the College of Engineering are offered under the Department of Architecture and Art. A discussion of the curricula in architecture is presented following the curricula in engineering.

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[1] May require adjustment if entrance credit includes only one unit of high school algebra.

[2] This could include Business Law 100, Political Science 150, or Rhetoric 151 as specific requirements; Accountancy 108, American or English Literature, or Philosophy 105 as option electives; Marketing 101 as a free elective. Whichever ones are chosen would affect the junior or senior program in that respect.

A physics experiment occupies nurses and engineers.

In addition to the fundamental and technological courses in each curriculum, some cultural courses are required, such as history, economics, and rhetoric, and others are elective, so that each student may broaden his program. While each student pursues a curriculum of his own choice according to the field of his particular interest, all students must take certain courses. Basic courses in mathematics, chemistry, physics, rhetoric, and general engineering are required in the first two years.

At the Chicago Undergraduate Division the first two years of courses are offered in the fields of aeronautical engineering, ceramic engineering, civil engineering, electrical engineering, engineering physics, general engineering, industrial engineering, mechanical engineering, metallurgical engineering, and mining engineering. Those few required courses which are not available here are properly noted.

Instruction in all courses is designed primarily to prepare the student to enter the College of Engineering on the Urbana campus of the University of Illinois in his third year.

Summary of Requirements for Graduation

Students in the College of Engineering who meet the University's general requirements with respect to registration, residence, and fees, and who maintain satisfactory scholastic records in this college, are awarded degrees appropriate to their curricula. Each curriculum requires a minimum of 136 semester hours of credit, not counting the required work in military science and physical education.

Each curriculum leads to the degree of Bachelor of Science and may ordinarily be completed in four years. A graduate of one curriculum ordinarily can qualify for another baccalaureate degree by doing a fifth year of work, consisting of thirty to thirty-six semester hours, acceptable to the faculty of this college, providing plans have been made toward such an arrangement at the beginning of his third year.

A graduate of the College of Liberal Arts and Sciences, or any other college of equal standing, who has adequate training in mathematics, physics, and mechanics to enable him to begin the third year of a curriculum in the College of Engineering, can usually qualify for the degree of Bachelor of Science from this college by two and one-half years of work.

Nontechnical electives include all courses in the College of Liberal Arts and Sciences except those in mathematics, chemistry, and chemical engineering; all courses in the College of Commerce and Business Administration; Architecture 113, 217, and 218; Art 111, 112, and 115; Education 300 through 304; General Engineering 140, 141, 216, 220, and 292; Industrial Engineering 230 and 239; Journalism 215, 216, and 218; Landscape Architecture 164 and 174; and Music 100 through 131. The student may petition to receive credit for other courses which conform to the objectives of what are known as the social-humanistic studies. It is expected that the student will consult with his departmental adviser when selecting his nontechnical electives.

Transfer students may substitute survey courses of nontechnical areas for their nontechnical electives, although circumstances may dictate some reduction in credit.

Departmental electives and technical options are restricted to courses of a technical character as listed under this classification by each department. Options are groups of related courses in a special field of subject matter.

Most of the curricula in the College of Engineering provide an opportunity for concentration of the student's effort in the senior year along

lines of his particular interest, within the broad field of his chosen curriculum. This is accomplished by curriculum options, which are groups of subject-matter related to recognized fields of concentration in professional engineering practice.

Common Program for Freshmen

FIRST YEAR FIRST SEMESTER 17 OR 18 HOURS		SECOND SEMESTER 18 HOURS	
Chem. 102 or 103—General Chemistry	3 or 4	Chem. 104—Chemistry of Metallic Elements	4
G.E. 100—Engineering Lectures	0	G.E. 102—Descriptive Geometry	3
G.E. 101—Elements of Drawing	3	Math. 133—Calculus	3
Hygiene 101—Personal and Environmental Hygiene	2	Physics 106—Mechanics	4
Math. 123—Analytic Geometry	5	Rhet. 102—Rhetoric and Composition	3
Rhet. 101—Rhetoric and Composition	3	Physical Education	1
Physical Education	1		

Curriculum in Aeronautical Engineering

FIRST YEAR

Common Program for Freshmen (above).

SECOND YEAR FIRST SEMESTER 16 OR 17 HOURS		SECOND SEMESTER 16 OR 17 HOURS	
Math. 143—Calculus	5	Met. E. 160 (New Course)[1]	3
M.E. 182—Manufacturing Processes	3	Physics 108—Heat, Sound, Light	4
Physics 107—Electricity and Magnetism, Modern Physics	4	T.A.M. 156—Analytical Mechanics (Statics and Dynamics)	5
Modern History or Political Science	3 or 4	Modern History or Political Science	3 or 4
Physical Education	1	Physical Education	1

Curriculum in Ceramic Engineering

FIRST YEAR

Common Program for Freshmen (above).

SECOND YEAR FIRST SEMESTER 18 HOURS		SECOND SEMESTER 18 HOURS	
Cer. E. 101—Introduction to Ceramic Engineering[2]	3	Cer. E. 102—Ceramic Processes and Equipment[2]	3
Chem. 123—Quantitative Analysis[3]	5	Geol. 130—Mineralogy for Engineers[2]	3
Math. 143—Calculus	5	Physics 108—Heat, Sound, Light	4
Physics 107—Electricity and Magnetism, Modern Physics	4	T.A.M. 154—Analytical Mechanics (Statics and Dynamics)	4
Physical Education	1	Technical or Nontechnical Electives	3
		Physical Education	1

Curriculum in Chemical Engineering

This curriculum is administered by the College of Liberal Arts and Sciences. See pages 52 to 54.

[1] Not offered at Chicago Undergraduate Division 1955.

[2] Not offered at Chicago Undergraduate Division; must be taken at Urbana.

[3] Not offered at Chicago Undergraduate Division; substitute Chemistry 122, Elementary Quantitative Analysis.

Curriculum in Civil Engineering

FIRST YEAR

Common Program for Freshmen (page 43).

SECOND YEAR — FIRST SEMESTER	17 HOURS
C.E. 105—Plane Surveying	2
C.E. 160—Building Construction	3
G.E. 111—Advanced Drafting for Civil Engineers	2
Math. 143—Calculus	5
Physics 107—Electricity and Magnetism, Modern Physics	4
Physical Education	1

SECOND SEMESTER	16 HOURS
C.E. 106—Surveying[1]	3
Geol. 150—Engineering Geology	3
Physics 108—Heat, Sound, Light	4
T.A.M. 150—Analytical Mechanics (Statics)	2
Nontechnical Electives	3
Physical Education	1

SUMMER

C.E. 207—Summer Surveying Camp 5

Curriculum in Electrical Engineering

FIRST YEAR

Common Program for Freshmen (page 43).

SECOND YEAR — FIRST SEMESTER	16 HOURS
Econ. 108—Elements of Economics	3
Math. 143—Calculus	5
Physics 107—Electricity and Magnetism, Modern Physics	4
Speech 101—Principles of Effective Speaking	3
Physical Education	1

SECOND SEMESTER	16 HOURS
Econ. 248—Personnel Administration	3
E.E. 126—Electric Circuits and Fields	4
Physics 108—Heat, Sound, Light	4
T.A.M. 154—Analytical Mechanics (Statics and Dynamics)	4
Physical Education	1

Curriculum in Engineering Physics

The purpose of this curriculum is to prepare students for investigations in engineering problems calling for a knowledge of physics and mathematics or chemistry, and for positions in certain industries which prefer men with a thorough education in basic science.

Students in the engineering physics curriculum, when registering for advanced undergraduate courses in physics at any stage in that curriculum, must have a grade average of at least 3.5 in all subjects, exclusive of the basic courses in military training and physical education, and a combined grade average of at least 3.5 in all courses in mathematics and physics taken prior to such registration. Transfer students must have a corresponding record in the institution from which they transfer, and must maintain such status at the University of Illinois.

[1] Offered for first time February, 1955.

FIRST YEAR

Common Program for Freshmen (page 43).

SECOND YEAR FIRST SEMESTER	17 HOURS
German or Nontechnical Electives[1]	4
Math. 143—Calculus	5
Physics 107—Electricity and Magnetism, Modern Physics	4
Nontechnical Electives[1]	3
Physical Education	1

SECOND SEMESTER	16 HOURS
German or Nontechnical Electives[1]	4
Math. 343—Advanced Calculus[2]	3
Physics 108—Heat, Sound, Light	4
Physics 341—Electricity and Magnetism	4
Physical Education	1

Curriculum in General Engineering

This curriculum provides a fundamental engineering training with moderate emphasis on design and a fixed requirement of fifteen hours in economics, corporation finance, engineering law, and labor problems. Specialization in any field of the student's choice is permitted in the liberal provisions for elective studies, as well as an option by means of which he may elect either structural or machine design. The curriculum is intended for students who do not wish to pursue the more specialized engineering curricula, but who wish to ally themselves with industrial and commercial development in the fields of management, operation, and construction — preparation for which is founded on scientific and engineering facts and disciplines, supplemented by economic and social orientations. A sales engineering option can be readily planned within the elective framework of the curriculum.

FIRST YEAR

Common Program for Freshmen (page 43).

SECOND YEAR FIRST SEMESTER	16 HOURS
Econ. 108—Elements of Economics	3
Math. 143—Calculus	5
M.E. 183—Materials Casting, or C.E. 115—General Surveying	3
Physics 107—Electricity and Magnetism, Modern Physics	4
Physical Education	1

SECOND SEMESTER	18 HOURS
C.E. 115—General Surveying, or M.E. 183—Materials Casting	3
M.E. 184—Metal Processing	3
Physics 108—Heat, Sound, Light	4
Speech 101—Principles of Effective Speaking	3
T.A.M. 150—Analytical Mechanics (Statics)	2
Nontechnical Electives	2
Physical Education	1

Curriculum in Industrial Engineering

FIRST YEAR

Common Program for Freshmen (page 43).

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[1] It is suggested that the nontechnical electives be chosen from the social sciences (i.e., anthropology, history, political science, psychology, and sociology) or the humanities (i.e., art, classics, English, humanities, music, and philosophy).

[2] Mathematics 341 may be substituted for Mathematics 343.

SECOND YEAR FIRST SEMESTER	18 HOURS
Econ. 108—Elements of Economics	3
Math. 143—Calculus	5
M.E. 183—Materials Casting, or M.E. 184—Metal Processing	3
Physics 107—Electricity and Magnetism, Modern Physics	4
T.A.M. 150—Analytical Mechanics (Statics)	2
Physical Education	1

SECOND SEMESTER	18 HOURS
G.E. 112—Advanced Drafting for Mechanical Engineers[1]	2
M.E. 184—Metal Processing, or M.E. 183—Materials Casting	3
Physics 108—Heat, Sound, Light	4
T.A.M. 211—Analytical Mechanics (Dynamics)	3
T.A.M. 221—Resistance of Materials	3
Nontechnical Electives	2
Physical Education	1

Curriculum in Mechanical Engineering

FIRST YEAR

Common Program for Freshmen (page 43).

SECOND YEAR FIRST SEMESTER	18 HOURS
Econ. 108—Elements of Economics	3
Math. 143—Calculus	5
M.E. 183—Materials Casting, or M.E. 184—Metal Processing	3
Physics 107—Electricity and Magnetism, Modern Physics	4
T.A.M. 150—Analytical Mechanics (Statics)	2
Physical Education	1

SECOND SEMESTER	18 HOURS
G.E. 112—Advanced Drafting for Mechanical Engineers[1]	2
M.E. 184—Metal Processing, or M.E. 183—Materials Casting	3
Physics 108—Heat, Sound, Light	4
T.A.M. 211—Analytical Mechanics (Dynamics)	3
T.A.M. 221—Resistance of Materials	3
Nontechnical Electives	2
Physical Education	1

Curriculum in Metallurgical Engineering

FIRST YEAR

Common Program for Freshmen (page 43).

SECOND YEAR FIRST SEMESTER	18 HOURS
Chem. 123—Quantitative Analysis	5
Math. 143—Calculus	5
Physics 107—Electricity and Magnetism, Modern Physics	4
Nontechnical Electives	3
Physical Education	1

SECOND SEMESTER	15 HOURS
Met. E. 150—Introduction to Metallurgy[2]	3
Physics 108—Heat, Sound, Light	4
T.A.M. 154—Analytical Mechanics (Statics and Dynamics)	4
Nontechnical Electives	3
Physical Education	1

Curriculum in Mining Engineering

FIRST YEAR

Common Program for Freshmen (page 43).

SECOND YEAR FIRST SEMESTER	18 HOURS
Min. E. 151—Elements of Mining[3]	2
C.E. 115—General Surveying	3
Math. 143—Calculus	5
Geol. 150—Geology for Engineers	3
Physics 107—Electricity and Magnetism, Modern Physics	4
Physical Education	1

SECOND SEMESTER	18 HOURS
Min. E. 152—Fuels[3]	3
Min. E. 154—Mine Surveying[3]	2
Econ. 108—Elements of Economics	3
Geol. 130—Mineralogy for Engineers[3]	3
Physics 108—Heat, Sound, Light	4
T.A.M. 150—Analytical Mechanics (Statics)	2
Physical Education	1

SUMMER FIRST AND SECOND WEEKS	
Min. E. 205—Summer Mine Surveying[3]	2

[1] Offered for first time February, 1955.
[2] Not offered at Chicago Undergraduate Division 1955.
[3] Not offered at Chicago Undergraduate Division.

Offered under the College of Engineering.

The curriculum in architecture is a five-year course and is offered with two optional programs. For both options, the work for the first year is identical. A field of specialization is selected in the second year.

The general option places the major emphasis on architectural design and includes a substantial program in architectural construction. While the esthetic is emphasized, basic preparation in liberal and scientific fields is required. The aim is to train the student for efficient service as a draftsman or designer in an architectural organization and to provide him with the necessary foundation for future independent practice.

The construction option (architectural engineering) offers a major study in building design, a thorough training in all forms of building construction, and emphasizes the structural and mechanical aspects of architecture. As the curriculum includes three and one-half years of architectural design, freehand drawing, and the history of architecture, the student who is primarily interested in construction can acquire a considerable knowledge of the artistic and utilitarian phases of planning. This option

Architects study model houses.

affords a relatively wide range of elective courses in the social sciences, business, engineering, language, and literature. It also provides sufficient training for independent practice as an architectural engineer.

In either option, the graduate who has acquired the necessary experience can apply for examination for State Professional Registration.

Excellent facilities in lecture, drafting rooms, and studios are provided by the Department of Architecture and Art. The departmental Fine Arts Reading Room affords an outstanding collection of 6,000 volumes, 7,000 slides, innumerable pamphlets, clippings, and graphic material.

Since the Undergraduate Division is located in Chicago, the department has numerous opportunities to present outstanding architects and professional lecturers as well as inspection trips to museums, galleries, and various types of buildings under construction.

The practice courses in art are primarily for students in the architectural curriculum. Courses in the history and appreciation of art, drawing, and sculpture are provided for students registered in other colleges of the University.

Electives

Electives provided in the two architectural curricula may consist of any courses given in the University and not required in the curricula, not paralleling the subject matter of required courses, and not open to freshmen. The following, which are open to freshmen, are also acceptable as electives: History 111, 112, 131; Botany 100, 101; Geography 101, 104, 105; Geology 101; Biology 101; Speech 101, 141; English 111, 112; Accountancy 101. Courses with prerequisite of sophomore standing which are acceptable as electives include Rhetoric 152; Economics 108; English 131; Political Science 150, 151; Sociology 100.

Curriculum in Architecture (Five Years)

FIRST YEAR — FIRST SEMESTER	15 HOURS
Art 181—Freehand Drawing	2
G.E. 107—Architectural Projections	2
Hygiene 101—Personal and Environmental Hygiene, or Hygiene 104—Personal and Community Health	2
Math. 117—Combined Freshman Mathematics	5
Rhet. 101—Rhetoric and Composition	3
Physical Education	1

SECOND SEMESTER	15 HOURS
Arch. 101—Introduction to Architecture	3
Art 182—Freehand Drawing	2
G.E. 108—Architectural Projections	2
Math. 127—Combined Freshman Mathematics	4
Rhet. 102—Rhetoric and Composition	3
Physical Education	1

SECOND YEAR FIRST SEMESTER	16 HOURS
Arch. 131—Architectural Design	3
Arch. 141—Materials and Methods of Construction I	2
Art 183—Freehand Drawing	2
Physics 101—General Physics	5
Elective	3
Physical Education	1

SECOND SEMESTER	16 HOURS
Arch. 113—History of Ancient Architecture	2
Arch. 132—Architectural Design	3
Arch. 142—Materials and Methods of Construction II	2
Art 184—Freehand Drawing	2
T.A.M. 171—Elementary Mechanics	3
Elective	3
Physical Education	1

Curriculum in Architectural Engineering (Five Years)

FIRST YEAR

Common Program for Freshmen (page 48).

SECOND YEAR FIRST SEMESTER	16 HOURS
Arch. 131—Architectural Design	3
Arch. 141—Materials and Methods of Construction I	2
Art 183—Freehand Drawing	2
Math. 137—Calculus	3
Physics 101—General Physics	5
Physical Education	1

SECOND SEMESTER	15 HOURS
Arch. 113—History of Ancient Architecture	2
Arch. 132—Architectural Design	3
Arch. 142—Materials and Methods of Construction II	2
Art 184—Freehand Drawing	2
Math. 147—Calculus	3
T.A.M. 150—Analytical Mechanics	2
Physical Education	1

College of Liberal Arts and Sciences

The College of Liberal Arts and Sciences at the Chicago Undergraduate Division offers the first two years of work in the several professional, pre-professional, and general curricula offered in this college at the Urbana campus. In all these curricula, the first two years are devoted to general basic education with increasing specialization in the last two years. A student who is not certain of his vocational objective at the time of his admission to college has an opportunity to do considerable educational exploration in his first two years and to change his vocational objective without additional time. Such a change after the beginning of the junior year usually can not be made without loss of time.

It is assumed that upon completion of the two years' work in the Chicago Undergraduate Division students will transfer to the Urbana campus to continue in their chosen field at the junior level. Students desiring to transfer to institutions other than the Urbana campus of the University of Illinois should familiarize themselves with the requirements of the school of their choice so that they may plan their work most effectively while at the Chicago Undergraduate Division.

The following Liberal Arts and Sciences curricula are offered at the Chicago Undergraduate Division: general, chemistry, chemical engineering, premedicine, predentistry, prenursing, teacher-education, prelaw, pre-

veterinary medicine, and prejournalism. Content of the courses closely parallels that given on the Urbana campus of the University of Illinois.

General Curriculum

All students who do not elect to follow one of the specialized curricula described below enroll in the general curriculum. The general curriculum requires a number of basic courses in literature or philosophy, social studies and natural sciences, and a reading knowledge of at least one foreign language. Each student must select a major and a minor or a split minor in a field of concentration the last two years.

Because of the wide range of courses open to students in the general curriculum, it is not feasible to specify definite sequences of courses to be taken by any student in each of the four years of this curriculum. Under the guidance of an adviser, each student is expected to plan his own program within the general requirements outlined below. Students at the Chicago Undergraduate Division will find it to their advantage to complete the group requirements listed on pages 51 and 52 in their first four semesters in the University.

SUMMARY OF REQUIREMENTS FOR GRADUATION

Each candidate for the degree of A.B. or B.S. in the general curriculum of Liberal Arts and Sciences must meet the following requirements:

Hygiene — Hygiene 101 or 104.

Physical Education — Four semesters.

Rhetoric — Rhetoric 101 and 102. (A student with "C" or "D" in Rhetoric 102 must pass qualifying examination or take Rhetoric 200.)

Foreign Language — Equivalent of two college years in same language.

U. S. History — One unit of American history in high school or History 151 and 152.

Mathematics — One unit of algebra and one unit of plane geometry in high school or Mathematics 101 and 102.

Major — Twenty approved hours in one department.

Minor(s) — Twenty approved hours in one or two departments.

Advanced hours — Thirty hours of credit in courses not open to freshmen and sophomores.

Residence — Either first ninety hours uninterrupted, or last thirty hours uninterrupted at the University of Illinois. For students at the Chicago Undergraduate Division, the junior or senior year (thirty semester hours) must be taken at Urbana.

Average — 3.0 ("C") minimum average.

Biological Sciences[1] — Eight hours.

Physical Sciences[1] — Eight hours.

Humanities[1] — Eight hours.

Social Sciences[1] — Eight hours.

Total hours — 120 hours, excluding basic military and all physical education courses, with not more than one quarter of the work with a grade of "D."

[1] The eight hours must be taken in approved sequence.

REQUIRED SUBJECTS

1. **Foreign Language.** A reading knowledge of a foreign language (French, German, Greek, Italian, Latin, Portuguese, Russian, or Spanish) equivalent to that resulting from four semesters of study of a foreign language commenced in college. To be begun in the first semester of the freshman year, except as otherwise provided, and to be continued until the requirement is completed. This requirement is satisfied by passing French 104, German 104 or 144, Greek 202, Italian 104, Latin 104 or 105, Portuguese 104, Russian 204, Spanish 104, or a more advanced course in any of these languages. Proficiency examinations are offered in French, German, and Spanish. Note: No credit toward graduation is given for a beginning course in a foreign language unless it is continued through a full year. Students planning to enter a graduate college are advised to obtain a reading knowledge of both French and German.

2. **Group Requirements.** To be begun in the freshman year and completed before the senior year. Students at the Chicago Undergraduate Division will find it to their advantage to complete these requirements by the end of their fourth semester. Proficiency examinations may be taken for credit in some of these subjects.

Basic Knowledge. From high school: one unit of American history or History 151 and 152; one unit of algebra and one unit of plane geometry or Mathematics 101 and 102.

General Education. An approved two-semester course or sequence of courses in each of the following areas, with a minimum of eight hours credit in each: (a) humanities, (b) biological sciences, (c) physical sciences, (d) social sciences.

ELECTIVES

1. **Liberal Arts and Sciences.** Any course offered in the College of Liberal Arts and Sciences may be used as an elective.

2. **Other Colleges.** Electives totaling as much as but not more than thirty-two hours may be taken in other colleges and schools of the University and counted toward graduation from this college, in addition to the courses acceptable for major and minor requirements, if such electives are in conformity with the following list approved by the faculty:

LIBRARY
UNIVERSITY OF ILLINOIS

Accountancy. A total of 6 hours (including not more than one of the following courses: Accountancy 101, 102, 201).

Agricultural Economics. A total of 6 hours.

Architecture. A total of 15 hours.

Art. A total of 15 hours unless the student is majoring in history of art.

Business Law. A total of 6 hours.

Economics. All courses.

Education. A total of 20 hours.

Engineering. A total of 10 hours.

Food Technology. A total of 6 hours.

Forestry. A total of 3 hours.

Home Economics. All courses.

Horticulture. A total of 6 hours.

Hygiene. Hygiene 101 or 104 (2 hours).

Journalism. A total of 10 hours.

Landscape Architecture. A total of 7 hours.

Law. A student of senior standing with an average of 3.5 who has been in residence either the first two years or the last year of his prelegal work may take and count toward the A.B. degree not to exceed 32 hours in the College of Law, provided that not less than two courses amounting to at least 5 hours a semester are taken with the advice of the Dean of the College of Law, and provided further that if any such student desires to take more than 6 hours of law work he must also register in the College of Law.

Library Science. A total of 10 hours.

Management and Marketing. A total of 6 hours. Typewriting, secretarial training, and shorthand may not be counted for credit.

Military Training. A total of 8 hours in advanced courses.

Music. A total of 15 hours approved by the Director of the School, unless the student is majoring in music.

Physics. All courses.

Chemistry and Chemical Engineering

The minimum language requirement for graduation in the following curricula in chemistry and chemical engineering is the equivalent of two years of college work in German or French. When a student does not offer either German or French for entrance, the second year of the language required for graduation may be counted as an elective in either curriculum.

Students who enter with inadequate preparation in chemistry, mathematics, and foreign languages in high school will find it difficult to complete their professional training in chemical engineering in four years. The optional five-year curriculum is recommended especially for those who do not qualify for Chemistry 107 and Mathematics 117, and who do not have two units of high school credit in French or German. Students should note that they must have a 3.5 general average for registration in these curricula after they have attained junior standing.

Curriculum in Chemistry

FIRST YEAR — FIRST SEMESTER	17 HOURS
Chem. 107—General Chemistry and Qualitative Analysis[1]	5
German or French	4
Math. 117—Freshman Mathematics[2]	5
Rhet. 101—Rhetoric and Composition	3
Physical Education	. .

SECOND SEMESTER	18 HOURS
Chem. 108—General Chemistry and Qualitative Analysis	5
German or French	4
Math. 127—Freshman Mathematics[2]	4
Hygiene 101—Personal and Environmental Hygiene, or Hygiene 104—Personal and Community Health	2
Rhet. 102—Rhetoric and Composition	3
Physical Education	. .

SECOND YEAR — FIRST SEMESTER	16 HOURS
Chem. 124—Quantitative Analysis	5
Math. 137—Calculus	3
Physics 106—Mechanics	5
Physical Education	. .
Electives[3]	3

SECOND SEMESTER	15 TO 18 HOURS
Chem. 234—Organic Chemistry[4]	5
Math. 147—Calculus	3
Physics 107—Electricity, Magnetism, Modern Physics	5
Physical Education	. .
Electives[3]	2 to 5

Curriculum in Chemical Engineering (Four Years)

FIRST YEAR — FIRST SEMESTER	17 HOURS
Chem. 107—General Chemistry and Qualitative Analysis[5]	5
G.E. 106—Elements of Drawing	3
Hygiene 101—Personal and Environmental Hygiene, or Hygiene 104—Personal and Community Health	2
Math. 122—Analytic Geometry[6]	4
Rhet. 101—Rhetoric and Composition	3
Physical Education	. .

SECOND SEMESTER	17 HOURS
Chem. 108—General Chemistry and Qualitative Analysis[5]	5
Math. 132—Calculus[6]	5
Physics 106—Mechanics	4
Rhet. 102—Rhetoric and Composition	3
Physical Education	. .

[1] All students with entrance credit in chemistry are required to take a proficiency examination before registering for Chemistry 107. Those who do not show the necessary proficiency will be placed in Chemistry 101 or 102, after which they will take Chemistry 106 and 110. For students without entrance credit in chemistry, the required sequence is Chemistry 101, 106, and 110.

[2] For students who do not take Mathematics 117-127, the required sequence is Mathematics 112 (or 111), 114 (or 115), 122, 132, and 142.

[3] Suggested courses for electives are Zoology 101, 107, 132; Biology 101, 111, 121, 131, 132; Botany 100, 101; English 121, 122; Geology 130, 150; History 151, 152; Bacteriology 104, 105; German or French. Of the total electives for graduation, at least twelve hours should be from advanced courses in chemistry and at least ten hours from courses offered by other departments.

[4] Not given at Chicago Undergraduate Division. Chemistry 133 may be substituted under certain conditions. Consult the Division of Physical Sciences.

[5] Students without entrance credit in chemistry take the sequence Chemistry 101, 106, 110, 124, etc.

[6] Students without the required entrance credits in mathematics take Mathematics 112 (or 111), 114 (or 115), 122, 132, and 142.

SECOND YEAR FIRST SEMESTER	16 HOURS
Chem. 124—Quantitative Analysis	5
German or French[1]	4
Math. 142—Calculus	3
Physics 107—Electricity, Magnetism, Modern Physics	4
Physical Education	..

SECOND SEMESTER	17 HOURS
Chem. 240—Elementary Physical Chemistry[2]	5
Chem. 241—Elementary Physical Chemistry Laboratory[2]	1
German or French[1]	4
Physics 108—Heat, Sound, Light	4
T.A.M. 150—Analytical Mechanics (Statics)	2
Physical Education	..
Electives[3]	3

Optional Curriculum in Chemical Engineering (Five Years)

FIRST YEAR FIRST SEMESTER	15 TO 17 HOURS
Chem. 101 or 102—General Chemistry[4]	5 or 3
German or French	4
Math. 117—Freshman Mathematics[5]	5
Rhet. 101—Rhetoric and Composition	3
Physical Education	..

SECOND SEMESTER	18 HOURS
Chem. 106—Inorganic Chemistry	5
German or French	4
Hygiene 101—Personal and Environmental Hygiene, or Hygiene 104—Personal and Community Health	2
Math. 127—Freshman Mathematics[5]	4
Rhet. 102—Rhetoric and Composition	3
Physical Education	..

SECOND YEAR FIRST SEMESTER	17 HOURS
Chem. 110—Qualitative Analysis	5
German or French	4
Math. 137—Calculus	3
Physics 106—Mechanics	5
Physical Education	..

SECOND SEMESTER	17 HOURS
Chem. 124—Quantitative Analysis	5
German or French	4
Math. 147—Calculus	3
Physics 107—Electricity, Magnetism, Modern Physics	5
Physical Education	..

Premedical Curriculum

Any freshman whose scholastic rank is in the upper half of his high school graduating class, on matriculating in the College of Liberal Arts and Sciences, is eligible for admission to the premedical curriculum.

Premedical students must maintain a 3.5 average during the first two semesters in the curriculum. By the end of the third semester the average for the three semesters must be raised to 3.75 and this average must be

[1] Two years of French and/or German are required for the B.S. degree. Two units of high school credit in either of these languages is equivalent to one year of college credit. Students entering without German or French in high school may substitute the second year of the language requirement for the six hours of electives referred to in footnote 3.

[2] Not given at Chicago Undergraduate Division.

[3] Six hours of electives must be chosen from the Divisions of Humanities or Social Sciences with the approval of the adviser. The courses are intended to broaden the engineer and provide an interest and liberal education in history, language, literature, philosophy, political science, or public speaking.

[4] Students who qualify for Chemistry 107 should take the Chemistry 107, 108, 124, 240 sequence rather than Chemistry 101, 106, 110, 124 and thus have five additional hours of advanced electives.

[5] For students who do not take Mathematics 117-127, the required sequence is Mathematics 112 (or 111), 114 (or 115), 122, 132, and 142.

maintained. Students who fail to meet these minimum requirements will be transferred to the general curriculum.

A student transferring to this college with advanced standing must meet the scholastic requirements at the level at which he transfers, in terms of the University's grading system, in order to be admitted to the premedical curriculum.

Other factors being equal, students at the University of Illinois who have completed the premedical curriculum with an average of 4.3 or better, will be given preferential consideration by the Committee on Admissions, provided that at least the second and third years have been done within the University.

The specific requirements for admission to the College of Medicine at the University of Illinois are as follows:

	SEMESTER HOURS
Chemistry (including, in addition to introductory courses, four hours of organic chemistry, three hours of quantitative analysis—Chemistry 101 or 102, 105, 122, and 133)	16
Physics (including laboratory work in mechanics, heat, sound, light, and electricity—Physics 101 and 102)	8
Biology (including general[1] and vertebrate zoology and general embryology)	10
Rhetoric and Composition (Rhetoric 101 and 102)	6
Modern Language (French, German, or Spanish, etc.)	6
Social Sciences Electives (including courses from at least two of the following fields: anthropology, economics, history, philosophy, political science, psychology, and sociology)	14
Electives	28
Total	88

Predental Curriculum

Students applying for admission to the predental curriculum must have ranked in the upper half of their high school graduating class. They must maintain at all times in the curriculum a minimum average of 3.5. The work covered by the first two years of the premedical curriculum enables students to meet the requirements for admission to the University of Illinois College of Dentistry. Since the function of the predental years is to supply a general background for the student as well as specific training in the fundamental concepts of the sciences, it is recommended that the elective hours also include history, economics, sociology, philosophy, and at least one modern language.

The specific requirements for admission to the College of Dentistry are as follows:

[1] The general zoology requirement may be met by Biology 101 and 131, or Biology 101 with a grade of "B."

	SEMESTER HOURS
Chemistry (including three hours of quantitative analysis and four hours of organic chemistry—Chemistry 101 or 102, 105, 122, and 133)	12
Physics (Physics 101 and 102)	6
Biology (including general zoology[1])	6
Rhetoric and Composition (Rhetoric 101 and 102)	6
Electives (including history, economics, sociology, philosophy, and at least one modern language; excluding military, hygiene, and physical education)	30
Total	60

Predental students who wish to be candidates for the degree of Bachelor of Science in Dentistry on the completion of the second year in the College of Dentistry should consult the College Catalog.

Prenursing Curriculum

A new four-year nursing curriculum began in June, 1954.

The former prenursing curriculum is open only to students who had registered in this curriculum by March 1, 1954. These students will receive the degree of Bachelor of Science in Nursing on completion of the prenursing program prescribed below and the professional training, thirty to thirty-six months, in the School of Nursing at one of the four affiliated hospitals — Cook County, Michael Reese, Presbyterian, and St. Luke's.

	SEMESTER HOURS
Rhetoric and Composition	6
Social Sciences (including the equivalent of a course in sociology and a course in psychology)	12
Humanities	6
Chemistry (one semester of general and one semester of organic chemistry)	6
Biological Sciences (including a course in bacteriology)	8
Physics (a course specially designed for nurses or one year of college physics)	4
Electives (one year of foreign language recommended)	18
Total	60

Continuation Program in Nursing

This program leads to the degree of Bachelor of Science in Nursing, which is conferred by the School of Nursing. It is open to holders of the Diploma in Nursing conferred by one of the affiliated hospital schools — Michael Reese, Presbyterian, St. Luke's, Cook County — all of Chicago. The program consists of four semesters, plus one summer session or half semester of eight weeks. The first two semesters are in the College of Liberal Arts and Sciences, either in Urbana or at the Chicago Undergraduate Division, the third semester in the College of Liberal Arts and Sciences in Urbana, the remainder in the University of Illinois School of Nursing, with residence as indicated.

[1] The general zoology requirement may be met by Biology 101 and 131, or Biology 101 with a grade of "B."

REQUIREMENTS FOR ADMISSION

Candidates shall apply to the College of Liberal Arts and Sciences for admission to the program, which will be granted upon fulfillment of the following conditions.

1. Certification by the University of Illinois School of Nursing that the candidate holds the Diploma in Nursing from one of the affiliated schools, there received grades averaging 3.5 in theory and practice, and is recommended by the affiliated school.

2. Satisfaction of the requirements for admission to the general curriculum in the College of Liberal Arts and Sciences.

3. Certification by the University of Illinois School of Nursing that the candidate has achieved on the Graduate Nurse Test Battery of the National League of Nursing Education a score not lower than 1½ s.d. below the mean of collegiate norms for each of the clinical fields. This certification shall entitle the candidate to a block credit of forty semester hours in Clinical Nursing.

4. Certification by the University of Illinois School of Nursing that the candidate has passed examinations (as set by the National League of Nursing Education) for advanced standing in microbiology (four semester hours) and anatomy and physiology (five semester hours).

5. Passing of examinations for advanced standing in rhetoric and composition (six semester hours), and general chemistry (five semester hours), administered by the appropriate departments of the College of Liberal Arts and Sciences.

6. Failure to demonstrate proficiency in any or all of the fields listed under paragraphs 4 and 5 shall not preclude admission to the Continuation Program, but shall require adding to the candidate's program appropriate courses in the subjects indicated. Courses taken for making up such deficiencies shall not in any case count as electives within the sixty semester hours of the Continuation Program.

REQUIREMENTS FOR GRADUATION

Each candidate for the degree must earn 120 semester hours, including thirty hours of advanced work done in residence. Sixty of these hours shall be those specified in paragraphs 3, 4, and 5 under Admission, above. The remaining sixty hours, constituting the Continuation Program

proper, must be passed with an over-all average of 3.0, and shall be made up as follows, subject to such rearrangement of courses or lengthening of the period of study as may be required because of entrance deficiencies, which should be removed within the first year.

SECOND YEAR — FIRST SEMESTER (URBANA)	HOURS
Ed. 211—Educational Psychology	3
Phil. 105—Moral Ideas and Practice	2
Social Sciences	6 or 9
For students electing Community Nursing:	
Psych. 216—Child Psychology	3
Sociol. 220—Marriage and the Family	3
Sociol. 276—Sociology of the City, or Sociol. 277—Rural Social Problems	3
For students electing Institutional Nursing:	
Psych. 250—Psychology of Personality	3
Psych. 255—Social Psychology, or Psych. 338—Abnormal Psychology, or Sociol. 212—Culture Patterns and the Individual	3
Electives (other courses in social sciences, or courses in the biological sciences, or other courses with permission of the Director of the School of Nursing, to total at least 15 hours)	

SECOND YEAR — SECOND SEMESTER (URBANA OR CHICAGO)	
Students transfer to the University of Illinois School of Nursing as candidates for the degree of Bachelor of Science in Nursing. Courses in this group will be offered alternately at the Chicago Professional Colleges and on the Urbana campus, if registration warrants.	
Nursing 200—Principles of Health Teaching	2
Nursing 301—Introduction to Community Nursing (for students electing Community Nursing), or Nursing 300—Introduction to Management in Nursing (for students electing Institutional Nursing)	3
Nursing 302—Seminar in Trends and Problems in Nursing Services	3
Electives (as required to bring total credit hours to 116 in this semester; minimum, 3 hours)	

SUMMER SESSION OR HALF SEMESTER	
Nursing 311—Field Practice in Community Nursing (for students electing Community Nursing), or Nursing 310—Field Practice in Management Nursing (for students electing Institutional Nursing)	4

Preveterinary Curriculum

The two-year preveterinary curriculum in the College of Liberal Arts and Sciences is followed by the four-year curriculum in the College of Veterinary Medicine in Urbana. Students applying for admission to the preveterinary curriculum must rank in the upper half of their high school graduating class. Students transferring with advanced standing must have maintained at least a 3.5 average in terms of the University's grading system. Students must maintain at least a 3.5 average to remain in the curriculum.

The specific requirements for admission to the College of Veterinary Medicine at Urbana are as follows:

	SEMESTER HOURS
Chemistry (including organic and quantitative analysis—Chemistry 101 or 102, 105, 122, and 133)	16
Biological Sciences[1] (including botany and general zoology)	8

[1] The biological sciences requirement may be met by Biology 101 and 131.

Physics (including laboratory—Physics 101 and 102)	8
Foreign Language	6
Rhetoric and Composition (Rhetoric 101 and 102)	6
Electives in not less than two of the following fields: economics, fine arts, language, geography, history, literature, philosophy, political science, psychology, sociology, speech. Approximately one-half of these credits should be in social sciences	9
Free electives	7
Total	60

The preveterinary curriculum is extremely rigid and failure to register in the prescribed courses in the proper sequence may result in an additional semester of study.

Prelaw Curriculum

The prelegal courses constitute a highly important phase of the education of students planning the study of law, and this work should be planned with care. Students contemplating the study of law are advised to consult with the Student Counseling Bureau at the Chicago Undergraduate Division relative to their interests and aptitudes for law.

Students taking the curriculum leading toward degrees in both liberal arts and law comply with the graduation requirements in the general curriculum. Such students are urged to complete all of these requirements before entering the College of Law except the minor and advanced hours. The prospective law student is advised to choose his work, beyond those subjects prescribed in liberal arts, from among the following fields: English, with special emphasis on rhetoric and speech; political science; history, with emphasis on American and English constitutional history; economics; philosophy, and particularly logic; Latin; psychology; sociology; mathematics; and accountancy.

Home Economics Curriculum

Students planning to major in home economics may profitably attend the Chicago Undergraduate Division for one year. Courses for the freshman program in home economics should be chosen only after consultation with the Dean of the College of Liberal Arts and Sciences.

Teacher Education Curricula

Of the curricula in teacher education which have been approved by the College of Liberal Arts and Sciences, preliminary work in twelve curricula is offered at the Chicago Undergraduate Division as follows: biology, chemistry, English, French, geography, German, mathematics,

mathematics and physical sciences, physics, social studies, Spanish, speech, and speech correction. In order to meet graduation and state certification requirements, these curricula are relatively rigid and failure to take the prescribed courses of the first two years within that time may result in an additional semester of undergraduate work.

The first two years of elementary education curriculum, which is designed to meet the requirements for teaching in the elementary and kindergarten-primary grades of Illinois schools, are also administered by this college.

Prejournalism Curriculum

Students planning to enter the School of Journalism and Communications register as prejournalism freshmen and sophomores following the general curriculum in the College of Liberal Arts and Sciences. Courses in English literature and rhetoric, foreign languages, physical sciences, and social studies are recommended as desirable preparation for the profession of journalism. The ability to use a typewriter should be acquired before entering this school.

For admission to the School of Journalism and Communications as a candidate for a degree, a student must have completed fifty-six semester hours of work in one of the undergraduate curricula, exclusive of required courses in physical education and military training, with an average grade of 3.5 (one-half of the college work with an average grade of "B" and one-half with an average grade of "C"). An applicant for admission will find it to his advantage to include in his prejournalism curriculum at least six hours of rhetoric and composition, twelve hours of history, political science, economics, and sociology, and ten hours of science, including mathematics.

The School of Journalism and Communications offers the following curricula: editorial, advertising, publication management, and radio-television.

School of Physical Education

All students entering the University as freshmen are required to obtain four hours of credit in physical education. Each student is given a health examination and a motor fitness test before registration. The findings by the Health Service and the testing division are used as a basis for prescribing each student's immediate physical education program. Students

Lake Michigan is background for modern dancing.

with handicapping physical defects are assigned to prescribed activities. Students with low scores in motor fitness are assigned to basic physical fitness courses.

Students who are organically sound and demonstrate a fair degree of motor fitness are permitted to elect from a variety of activity courses. All general courses in physical education meet three times a week for one hour or two times a week for one and one-half hours. All general courses in physical education carry one hour of credit.

Women students entering the University as freshmen are required to obtain credit for four semester hours of work in physical education; those entering the University with sophomore standing are required to obtain credit for two semesters of work in physical education. Women are offered instruction in elementary, intermediate, and advanced rhythms, individual gymnastics, basketball, volleyball, softball, badminton, tumbling, apparatus stunts, fundamentals of motor fitness, archery, games for school and playground, folk and square dance, boating and fishing, swimming, golf, and bowling. Women's physical education classes are held in the Auditorium at the east end of the Pier. Through the Women's Athletic Association and Orchesis, the modern dance group, women students are offered wide opportunities for extracurricular activities in sports and the dance.

Men students entering the University with less than sixty semester hours credit are required to secure four semesters of credit in physical education, including the amount transferred. In addition to intercollegiate and intramural athletics, men students in the physical education classes are offered instruction in volleyball, badminton, swimming, individual

tumbling, double tumbling, apparatus stunts, boxing, wrestling, weight lifting, archery, boating and fishing, personal defense activities, and a basic physical fitness program.

Veteran students who have fulfilled the four-hour physical education requirement while in the service are exempt from taking physical education. Veterans are encouraged to utilize the physical education facilities, but additional credit will not be granted except as elective credit in the College of Commerce and Business Administration.

In addition to the service program, the Physical Education Department offers the first two years of the professional training curricula leading to the degrees of Bachelor of Science in Physical Education, in Health Education, and in Recreation. Complete information concerning the professional training curricula is available at the office of the Director of Physical Education.

Army Reserve Officers' Training Corps

Authorization

The Reserve Officers' Training Corps (R.O.T.C.) is organized under authority of the Act of Congress of June 3, 1916, and was activated at the University of Illinois, Chicago Undergraduate Division, in September, 1950.

Educational Aim

The fundamental educational aim of the R.O.T.C. is to make the student conscious of his duties and responsibilities to his government as a citizen of this nation and, to so prepare him, that in time of national emergency he can fufill his responsibility in accordance with his training and capabilities.

The broad aspect of the military training program gives the student a training which is as valuable to him in his civilian career as it is in his service to his country in time of emergency. The program offers a wide variety of work that is fundamental in nature. It should instill in the student an indelible impression of the place of the armed forces in the American democracy, and of the extent to which our military organization is dependent on the productive capacity of the nation.

Co-ed sponsor and officer inspect R.O.T.C.

Physical Training

A military unit is largely dependent for its efficiency upon the physical fitness of the individuals composing it. Therefore, it is the policy to encourage and support the physical training given by civilian instructors.

Participation

The R.O.T.C. course is offered to qualified male students on a volunteer basis. Qualifications for enrollment in the R.O.T.C. are that the student be regularly enrolled in the University, be a citizen of the United

States, be within specified age limits, be physically qualified, and be approved by the Professor of Military Science and Tactics.

Program of Instruction

College level R.O.T.C. instruction is divided into two parts: the basic course, which comprises the first two years of the program, and the advanced course, comprising the last two years of the program. Only the first three years of this program are offered at the Chicago Undergraduate Division.

Basic Course

The first two years of military training are designated as the basic course. Students in the basic course will devote three hours a week to military instruction which will consist of two hours of classroom instruction and one hour of drill. Accreditation for the basic course is one hour each semester. A student entering the University of Illinois from a high school or preparatory school which has an accredited Junior Division R.O.T.C. program may be granted advance standing in the basic course not to exceed one-third of the number of terms or semesters of the Junior Division R.O.T.C. successfully completed. A Department of Defense Form No. 68, prepared by the Professor of Military Science and Tactics of the institution previously attended, must be submitted to the Military Science Department prior to registration or must be in the hands of the student concerned at the time of registration. Students intending to enroll in the basic course must not have reached the age of twenty-three at the time of enrollment.

Advanced Course

The advanced course of the R.O.T.C. leads to a Reserve or Regular commission in the Army. The first year of advanced course training in Infantry and Engineers is offered to students who have successfully completed the two-year basic course or to veterans of the Army, Air Force, Navy, and Marine Corps who have completed one year of active service in the Armed Forces and have been honorably discharged. Students enrolling initially in the advanced course must not have reached their twenty-seventh birthday at the time of enrollment. Any student desiring entrance into the advanced course must be prepared to complete the course. The objective of the advanced course is to produce college-trained junior officers to meet the needs of the Army Reserve, National Guard, and Regular units.

The advanced course consists of five hours of instruction each week, four hours of which is classroom instruction and one hour of drill. Accreditation for the advanced course is three credit hours each semester. All candidates for a Reserve commission must have reached an age of not less than twenty-one years, completed four years of education at college or university level, and successfully completed the advanced course which includes a summer encampment. The encampment is of approximately six weeks duration and is usually held at the end of the first year of the advanced course. Students completing all requirements for a Reserve commission, but who have not reached the age of twenty-one will be given a certificate of capacity and a temporary commission and will receive the Reserve Officer Commission shortly after their twenty-first birthday. Those with distinguished records in R.O.T.C. are selected for consideration for Regular commission in the Army.

All members of the advanced course will receive the following: monetary allowance in lieu of subsistence, officer-type uniform, the pay of the seventh enlisted grade while at the advanced summer encampment, and all necessary texts and materials on a loan basis.

Deferment from Selective Service

Deferment from Selective Service is granted for completion of the four-year course to those students who are qualified and approved by a deferment board composed of military and civilian faculty personnel. Deferred students will retain their deferment throughout their course in military, provided they maintain the required standards.

Clothing and Equipment

All students enrolled in the R.O.T.C., including the basic course, receive an Army officer-type uniform and textbooks at government expense. Equipment and supplies are provided on a loan basis and must be returned at the close of the school year. A deposit of $10 is required prior to the issue of equipment. This deposit, through the Military Property Custodian, is refundable at the close of the school year.

Courses of Instruction

Accountancy

101. Principles of Accounting. Simple transactions, general ledger accounts, books of original entry, closing process, trial balances, financial statements, accounting for negotiable instruments, controlling accounts, adjusting entries. Students who present one unit of bookkeeping for entrance should register in Accountancy 102. They will not be allowed full credit in Accountancy 101 unless high school bookkeeping credit can be dropped. I, II; 3. Students with 95 or more credit hours receive only 2 hours credit.

102. Principles of Accounting. Similar to Accountancy 101. For those who present one unit of entrance credit in bookkeeping. Students who have failed in Accountancy 101 are permitted to register in Accountancy 102 and receive credit as in Accountancy 101 if their final grade is "C" or above. I, II; 2. Students with 95 or more credit hours receive only 1 hour credit.

105. Accounting Procedure. Relation of business documents to the accounts; fundamentals of partnership and corporation accounting; business forms and records; financial statement analysis. I, II; 3. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: Accountancy 101 or 102.

106. Elementary Cost Accounting. Accounting for production management. Principles and methods of accounting for managerial control of costs of production. I, II; 3. Prerequisite: One year of accountancy; sophomore standing; credit or registration in Economics 102 or 108.

108. Intermediate Accounting. Consideration at the intermediate level of accounts and transactions peculiar to the partnership and corporation types of organization; interpretation of financial statements and analysis of the principal accounts represented therein. I, II; 3. Prerequisite: Sophomore standing; Accountancy 105.

Architecture

101. Introduction to Architecture. Introduction to the building industry and the profession of architecture, exercises illustrating basic architectural forms and their organization. I, II; 3.

113. History of Ancient Architecture. A description and analysis of the development of the architecture of the ancient East, Greece, and Rome, related to the environmental and cultural setting. I, II; 2. Prerequisite: Architecture 131 or sophomore standing.

131. Architectural Design. Beginning study of architectural planning and designing. Fundamentals of sketching and presentation. I, II; 3. Prerequisite: Architecture 101; registration in General Engineering 108.

132. Architectural Design. Continued study of the fundamentals of architectural design. I, II; 3. Prerequisite: Architecture 131 or consent of instructor.

133. Architectural Design. Continued study of architectural planning and designing; principles of plan, elevation, and section in small buildings. I, II; 3. Prerequisite: Architecture 132.

141. Materials and Methods of Construction I. Wood frame construction as used in houses; manufacture and performance characteristics of materials; framing systems; typical details; finishing materials. I, II; 2. Prerequisite: Registration in Architecture 131.

142. Materials and Methods of Construction II. Non-fire resistance construction; manufacture and performance characteristics of materials; support systems; typical details; finishing materials. Lectures and drawings. I, II; 2. Prerequisite: Architecture 141.

Art

111. Introduction to Ancient and Medieval Art. Cultural analysis of the inter-related fields of architecture, sculpture, painting, and other humanistic studies previous to the Italian Renaissance. I; 3.

112. Introduction to Renaissance and Modern Art. Cultural analysis of the inter-related fields of architecture, sculpture, painting, and other humanistic studies beginning with the Italian Renaissance and continuing through the modern period. II; 3.

115. Art Appreciation. An introduction to the factors inherent in architecture, sculpture, painting, and other arts. Primarily for non-art students. I, II; 3.

181. Freehand Drawing. Simple groups of block form, still life, and casts in pencil and charcoal. Primarily for students in architecture and landscape architecture. I, II; 2.

182. Freehand Drawing. Simple groups of block form, still life, and casts in pencil and charcoal. Primarily for students in architecture and landscape architecture. I, II; 2. Prerequiste: Art 181.

183. Freehand Drawing. Charcoal drawing from the cast; water color. Primarily for students in architecture and landscape architecture. I, II; 2. Prerequisite: Art 182.

184. Freehand Drawing. Charcoal drawing from the cast; water color. Primarily for students in architecture and landscape architecture. I, II; 2. Prerequisite: Art 183.

Biological Sciences

101. Fundamentals of Biology. This course is designed to give a fundamental understanding of plant and animal life and their reproduction. It is not a survey of the plant and animal kingdoms, but is rather a scientific examination of the manner and means whereby plants and animals live and reproduce their kind. Lectures, laboratory, and quiz. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit.

111. General Botany. A survey of the plant kingdom. The morphology and physiology of representative plants from thallophytes through angiosperms are considered in building up a system of natural classification based upon phylogenetic relationships. The importance of plants in the system of

nature and human economics is emphasized. Lectures, laboratory, and quiz. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Biology 101.

115. Introductory Systematic Botany (Plant Taxonomy). Classification and identification of flowering plants, with special reference to the local flora, and the needs of high school teachers. Occasional field trips required. Lectures, laboratory, and quiz. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Biology 101 and 111.

116. Economic Botany. Lectures and demonstrations of the uses of plants and plant products by man. The origin and distribution of native and cultivated plants and their relation to human history. Forest, drug, food, textile, beverage, and other industrial institutions. Lectures and discussion. II; 3. Prerequisite: Biology 101 and 111.

121. Microbiology. A study of microorganisms and their role in the system of nature. Among the microorganisms are included the viruses and the microscopic multicellular plants and animals, as well as the protozoa and bacteria. Primary emphasis will be placed upon the bacteria. The systematic evolutionary, physiological, and ecological relationships of these organisms with both plant and animal worlds will be considered. Lectures, laboratory, and quiz. I, II; 4. Prerequisite: Biology 101.

126. Advanced General Bacteriology. General technic, special apparatus, and methods. Lectures, laboratory, and quiz. II; 4. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Biology 101 and 121; credit or registration in Chemistry 105.

131. General Zoology. A survey of the animal kingdom, the phylogenetic relationships of animals and classification. Emphasis is placed upon economically important and parasitic forms. Lectures, laboratory, and quiz. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Biology 101.

132. Comparative Vertebrate Anatomy. Classification and distribution of the vertebrate animals. Comparative anatomy of organs and organ systems, their function and evolution. Lectures, laboratory, and quiz. I, II; 5. Prerequisite: Biology 101 and 131, or Biology 101 with a grade of "B."

136. Bird Study. Native birds; their identification, food relations, seasonal distribution, migration activities, economic importance, and conservation. II; 2.

141. Vertebrate Physiology. This course is designed to furnish an understanding of the basic physiological activities of the vertebrate organism. Lectures, laboratory, and quiz. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Biology 101.

142. Physiology of the Nervous System. This course is planned to give an understanding of the physiological activities by which the nervous system carries out its function. Recommended as background for students of psychology, education, or biological sciences. Lectures, laboratory, and quiz. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Biology 101 and 141.

333. Vertebrate Embryology. The development of the vertebrate body and its organs. Lectures, laboratory, and quiz. I, II; 5. Prerequisite: Biology 101 and 132; junior standing.

Business Law

100. Basic Principles of Business Law. Basic principles of business law, covering the subjects of contracts, sales, negotiable instruments, and agency. Credit toward graduation will not be given for Business Law 201 or 261 in addition to Business Law 100. I, II; 3. Prerequisite: Accountancy 105; Economics 102; forty-five credit hours.

Chemistry

101. General Chemistry. For students who have no entrance credit in high school chemistry, or whose preparation is inadequate for Chemistry 102. I, II; 5. Students with 95 or more credit hours receive only 3 hours credit. Students who have received entrance credit for high school chemistry are given only 3 hours credit for Chemistry 101. Prerequisite: One unit of entrance credit in physics, or 2½ units of entrance credit in mathematics, or credit in Mathematics 111 or 112.

102. General Chemistry. For students who have had one year of high school chemistry. I, II; 3. Students with 95 or more credit hours receive only 2 hours credit. Students who have not used their high school chemistry for entrance may receive 5 hours credit for Chemistry 102 if they complete the course with a grade of "C" or higher. Prerequisite: One unit of entrance credit in chemistry or equivalent.

103. General Chemistry. Lectures, recitations, and laboratory. For engineering students who have had no chemistry. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. Students who have received entrance credit for high school chemistry are given only 3 hours credit in Chemistry 103. Prerequisite: One unit of entrance credit in physics, or 2½ units of entrance credit in mathematics, or credit in Mathematics 111 or 112.

104. Chemistry of the Metallic Elements. Lectures, recitations, and laboratory. Limited to students in the engineering curricula. I, II; 4. Credit in Chemistry 104 will not be granted to students who have received credit in Chemistry 105 or 106. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Chemistry 101, 102, or 103.

105. Inorganic Chemistry and Qualitative Analysis. Lectures, recitations, and laboratory. For students in the ceramic engineering curriculum and for students who are not eligible for Chemistry 104 or 106. I, II; 5. Credit in Chemistry 105 will not be granted to students who have received credit in Chemistry 104 or 106. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Chemistry 101, 102, or 103.

106. Inorganic Chemistry. Metallic elements. For students in the chemistry curriculum and for chemistry majors who are not premedical students. I, II; 5. Credit in Chemistry 106 will not be granted to students who have received credit in Chemistry 104 or 105. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Chemistry 101, 102, or 103.

107. General Chemistry. For students in the curriculum in chemistry or chemical engineering. Lectures, recitations, and laboratory. I; 5. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Excellent high school background in chemistry as shown by a placement examination.

108. General Chemistry and Qualitative Analysis. For students in the curriculum in chemistry or chemical engineering. Lectures, recitations, and laboratory. II; 5. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Chemistry 107.

109. General and Inorganic Chemistry. A course in general chemistry and the chemistry of the inorganic elements and compounds, completing in one semester the work usually taken in two. Open only to those who have had high school chemistry and who graduated from high school in the highest quarter of the class. Students who plan to specialize in chemistry or chemical engineering are advised to register in Chemistry 107 rather than Chemistry 109. Premedical students requiring more than five hours of general-inorganic chemistry are advised to take a two-semester sequence instead of Chemistry 109. I, II; 5. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: High school chemistry; graduation from high school in the upper quarter of the class.

110. Qualitative Analysis. Qualitative analysis of metals and inorganic compounds. Open to all students; required of students whose major is chemistry or chemical engineering and those registered in the curriculum in chemistry except students who qualify for Chemistry 107 and 108. I, II; 5. Prerequisite: Chemistry 106.

122. Elementary Quantitative Analysis. Gavimetric and volumetric analysis, stoichiometrical relations, practical applications. I, II; 5. Prerequisite: Chemistry 104, 105, or 106.

124. Quantitative Analysis. For all students in the chemistry curriculum and chemical engineering. I, II; 5. Prerequisite: Chemistry 110 or satisfactory record in Chemistry 107 and 108.

132. Elementary Organic Chemistry. This course does not satisfy the organic chemistry prerequisite for Chemistry 350, 354, or 355. Beginning course in organic chemistry especially for students in prenursing curriculum and in the continuation nursing curriculum. II; 3. Prerequisite: Chemistry 101 or 102, or equivalent.

133. Elementary Organic Chemistry. To fulfill the requirements for premedical, predental, preveterinary, dietetics, and home economics students. Lectures, recitations, and laboratory. I, II; 5. Prerequisite: Chemistry 105 or 110.

247. Elementary Physical Chemistry. For premedical students only. Lectures and laboratory. I, II; 4. Prerequisite: Chemistry 122 and 133; Physics 102 or 104, or equivalent.

Civil Engineering

105. Surveying. Use of transit, level, and tape; fundamental surveying procedures and office computations; land surveying. I, II; 2. Prerequisite: General Engineering 101; Mathematics 123.

106. Surveying. Topographic surveying; field astronomy; route surveying; stream gaging; introduction to photogrammetry. I, II; 3. Prerequisite: Civil Engineering 105; credit or registration in General Engineering 111.

115. General Surveying. Use and care of surveying instruments; methods of making engineering surveys; computations of areas and volumes; contour

problems; transit stadia mapping methods. I, II; 3. Prerequisite: General Engineering 101 or 104; Mathematics 114.

160. Building Construction. Materials, types of construction, and details for buildings. I, II; 3. Prerequisite: Sophomore standing.

235. Plain Concrete. Production, properties, specification requirements and uses of Portland cement, aggregates, mixing water, and admixtures; proportioning; field practice in the production of concrete; laboratory practice including tests on materials and concrete of various proportions; calculations and graphs based on values from concrete proportioning projects. I, II; 2. Prerequisite: Sophomore standing in engineering, architecture, or landscape architecture.

Economics

100. Introduction to Business. An introductory course on the principles and practices of our economic system from the point of view of the business manager. Open to freshmen only. I, II; 3.

102. Principles of Economics. Principles of production, supply, demand, value, price, distribution. I, II; 3. Prerequisite: One year of university work.

103. Principles of Economics. Principles of economics as applied to exchange, money, banking, price changes, governmental finance, etc. I, II; 3. Prerequisite: Economics 102.

108. Elements of Economics. A brief presentation of price determination, international trade and exchange, money and banking, and public finance. For non-commerce students only. Not open to those who have had Economics 102 and 103. I, II; 3. Prerequisite: One year of university work.

136. Economic History of the United States. Main events and leading personalities in the economic development of the United States as seen in the westward movement, the growth of industry, agriculture, commerce, finance, transportation, the trust movement, and labor, 1790 to the present. Open to freshmen only. I, II; 3.

138. Introduction to the Economic History of Modern Europe. The evolution of the economic institutions of modern Europe in relation to the development of industry, commerce, transportation, and finance in the principal European nations. For freshmen only. I, II; 3.

170. Elements of Statistics. Methods of collection — presentation and interpretation of quantitative economic data, averages, dispersion, index numbers, reliability of statistics, time series analysis, and simple correlation. I, II; 3. Prerequisite: Economics 102 or 108; sophomore standing.

Education

101. Nature of the Teaching Profession: An Orientation Course. This course is designed to help the student get answers to the questions: "What does education in its various branches have to offer?" and "What preparation in general education, subject matter fields, and professional education is required or desirable?" Through an extensive testing and counseling pro-

gram this course is designed to help the student evaluate his potentialities and problems with reference to becoming a teacher. I, II; 2.

109. Educational Psychology. The basic undergraduate course in psychology of education for prospective teachers. Materials and principles from the various areas of psychology (mental hygiene, learning, etc.) are applied to the practical problems of teaching. I, II; 3. Prerequisite: Psychology 100.

Electrical Engineering

114. Wiring and Illumination. Fundamentals of commercial and industrial illumination and wiring practice. Open to architecture and architectural engineering students only. I, II; 3. Prerequisite: Sophomore standing or consent of instructor.

126. Electric Circuits and Fields. Study of units and relations in electric and magnetic circuits and fields. Basic concepts of circuit parameters. I, II; 4. Prerequisite: Physics 103; Mathematics 132; credit or registration in Physics 104 and Mathematics 142.

English

101. Introduction to Poetry. Understanding of poetry through the reading and discussion of representative poems. I, II; 3. Students with 95 or more credit hours receive only 2 hours credit. Note: Credit is not given for English 101, 102, and 103 in addition to English 121 and 122. This course, plus English 102 and 103, satisfies the humanities requirement in general education.

102. Introduction to Drama. Understanding of drama through the reading and discussion of representative plays. The reading list will include selections from Greek, Elizabethan, modern English, continental, and American drama. I, II; 3. Students with 95 or more credit hours receive only 2 hours credit. See note under English 101.

103. Introduction to Fiction. Understanding of fiction through the reading and discussion of representative short stories and novels. The reading list will include Jane Austen's *Pride and Prejudice,* Balzac's *Père Goriot,* Dostoevski's *Crime and Punishment,* E. M. Forster's *A Passage to India,* and Hemingway's *A Farewell to Arms.* I, II; 3. Students with 95 or more credit hours receive only 2 hours credit. See note under English 101.

113. American Literature. A survey of American literature with emphasis on representative works of the major writers from 1620 to the Civil War. I, II; 3. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

114. American Literature. A survey of American literature with emphasis on representative works of the major writers from the Civil War to the present. I, II; 3. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

121. Chief English Writers Before 1800. *Canterbury Tales, Utopia,* two plays of Shakespeare, *Paradise Lost, Gulliver's Travels, Tom Jones, Rasselas.* Particularly recommended for students in professional and technical courses such as law, medicine, commerce, engineering, etc. Credit is not given for

English 121 in addition to English 101, 102, and 103. This course, plus English 122 and 123, satisfies the humanities requirement in general education. I, II; 3. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

122. Chief English Writers of the Nineteenth Century. Wordsworth, Byron, Carlyle's *Past and Present,* Arnold's prose and poetry, FitzGerald's *The Rubaiyat of Omar Khayyam,* readings from T. H. Huxley, Browning's poems, and one novel. Particularly recommended for students in professional and technical courses, such as law, medicine, commerce, engineering, etc. Credit is not given for English 122 in addition to English 101, 102, and 103. This course, plus English 121 and 123, satisfies the humanities requirement in general education. I, II; 3. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

123. Chief Modern English Writers. Conrad, Eliot, Joyce, Lawrence, Shaw, Yeats, and others. Credit is not given for English 123 in addition to English 101, 102, and 103. This course, together with English 121 and 122, satisfies the humanities requirement in general education. I, II; 3. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

131. Introduction to Shakespeare. I, II; 3. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

144. Contemporary Poetry. American poetry from Whitman to Sandburg, and English poetry from the pre-Raphaelites to Masefield. II; 3. Prerequisite: Six hours of English literature or junior standing.

French

101. Elementary Course. Grammar, pronunciation, reading of modern authors, composition, conversation. For students who have no credit in French. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. No credit for graduation is given for French 101 without French 102.

102. Elementary Course. Continuation of French 101. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: French 101 or one year of high school French.

103. Modern French. Rapid reading of modern authors, syntax, and composition. I, II; 4. Prerequisite: French 102 or two years of high school French.

104. Modern French. Continuation of French 103. I, II; 4. Prerequisite: French 103 or three years of high school French.

201. Introduction to French Literature. I; 3. Prerequisite: French 104 or four years of high school French.

202. Introduction to French Literature. II; 3. Prerequisite: French 104 or four years of high school French.

General Engineering

100. Engineering Lectures for Freshmen. Selected topics each week. Required of freshmen in the College of Engineering. I, II; no credit.

101. Elements of Drawing. Lettering; orthographic projection; working drawings; chart and diagram drawing; isometric and oblique drawing; freehand

sketching; tracings; methods of reproducing drawings. I, II; 3. Prerequisite: Plane geometry.

102. Descriptive Geometry. Theory of projections; solution of theoretical and practical problems involving size, shape, and relative position of common geometrical magnitudes such as points, lines, planes, curved surfaces, and solids; intersections, developments, shades and shadows, perspective drawing. I, II; 3. Prerequisite: Plane and solid geometry.

104. Advanced Drawing. Review of orthographic projection and working drawings; isometric, oblique, perspective, chart and diagram, topographical, architectural and structural drawing. I, II; 3. Prerequisite: General Engineering 101 or substantial equivalent.

107. Architectural Projections. Instrumentation; lettering; projection; intersections; conventions; shades and shadows. I, II; 2. Prerequisite: Plane geometry.

108. Architectural Projections. Shades and shadows; oblique, isometric, and perspective drawings; developments. I, II; 2. Prerequisite: General Engineering 107.

111. Advanced Drafting. For civil engineers. I; 2. Prerequisite: General Engineering 101 and 102, or consent of instructor.

112. Advanced Drafting. For mechanical engineers. II; 2. Prerequisite: General Engineering 101 and 102, or consent of instructor.

203. Aircraft Drafting and Lofting. Aircraft terminology, control and reference surfaces and systems; sheet metal terminology and fabrication; drafting standards and types of drawings; drafting room manuals and standard handbooks; descriptive geometry applied to simple layouts and details; aircraft fastenings; lofting — plane, tapered, and double curved surfaces, airfoils, intersections; practices and standards. I, II; 3. Prerequisite: General Engineering 101 or substantial equivalent.

210. Industrial Production Illustration. Mechanical and freehand drawings in axonometric, oblique, and perspective; shades and shadows; rendering of drawings with various media including some work with the airbrush; industrial production illustration. An approved elective in all engineering curricula. I, II; 3. Prerequisite: General Engineering 102, or 107 and 108.

212. Graphical Calculations. Use of various types of slide rules with special attention to the log-log scales; rectification of curves from laboratory data to devise empirical equations using various types of coordinate paper, construction and use of nomographs or aligning charts. For students in engineering; accepted as an approved elective in all engineering curricula. I, II; 1. Prerequisite: General Engineering 101 or equivalent; Mathematics 112, 114, and 122.

Geography

101. Elements of Geography. The geographic point of view; elements of physical landscape; planetary relations, weather, climate, climatic regions, landforms, natural resources. Geography 101 and 111 meet the general education requirement in physical science, and Geography 101 and 104 meet the general education requirement in social sciences, in the College of

Liberal Arts and Sciences. Lectures, discussions, and quiz. I, II; 5. Students with 95 or more credit hours receive only 4 hours credit.

104. World Regional Geography. Survey of the geographic structure of the world; regional patterns of settlement and land utilization; man's occupancy of the world. I, II; 3. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: Geography 101 or consent of instructor.

105. Introductory Economic Geography. Man's utilization of the major economic resources of the world from the standpoint of geographic patterns. Primarily for commerce students but open to others except those having credit in Geography 106. I, II; 3. Students with 95 or more credit hours receive only 2 hours credit.

111. Introductory Meteorology. The atmosphere; its composition, functions, and behavior in the production of various weather types; air masses; application to present-day activities. Lectures and quiz. I, II; 3. Prerequisite: Geography 101 or consent of instructor.

123. Geography of Illinois. Detailed regional study of the state with special emphasis on the cultural relations of Illinois to the rest of the nation. II; 3. Prerequisite: Geography 101, 104, or 106, or consent of instructor.

Geology

101. Physical Geology. Materials, structures, surface features of the earth and processes which have produced them. Lectures, quiz, and laboratory. One-half day field trip required. Geology 101 and 102 meet the general education requirement in the physical sciences. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit.

102. Historical Geology. Evolution of the earth and its life. Lectures and laboratory. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Geology 101 or Division of General Studies 141.

131. Mineralogy. A systematic study of minerals and common rocks. Lecture and laboratory. I; 3. Prerequisite: One semester of college chemistry.

132. Mineralogy. Continuation of Geology 131. A systematic study of minerals and common rocks. Lecture and laboratory. II; 3. Prerequisite: Geology 131.

150. Geology for Engineers. I, II; 3. Prerequisite: Sophomore standing in the College of Engineering.

German

101. Elementary Course. Oral practice, reading, and grammar for beginners. Not open to students who have had high school credit in this language. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. No credit toward graduation is given for German 101 without German 102.

102. Elementary Course. Continuation of German 101. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: German 101 or one year of high school German.

103. Intermediate Course. Modern narrative prose. Oral practice and sight reading. I, II; 4. Prerequisite: German 102, or two years of high school German, or equivalent.

104. Intermediate Course. Continuation of German 103. Literary reading. Classical and modern narrative prose. Oral practice and sight reading. I, II; 4. Prerequisite: German 103, or three years of high school German, or equivalent.

113. Practice in Conversation. Oral practice for the development of elementary skill in conversation and the improvement of pronunciation. This course is supplementary to German 103 and 104. I, II; 2. Prerequisite: German 102 or two years of high school German; registration in German 103 or 104.

210. Masterpieces of German Literature. Introduction to German literature, its subjects, forms, and ideals. I, II; 3. Prerequisite: German 104, 144, two years of college German, or equivalent.

History

111. Modern European History from the Renaissance to 1815. Europe from the age of the great discoveries to the close of the Napoleonic wars. I; 4. Students with 95 or more credit hours receive only 3 hours credit.

112. Modern European History, 1815 to the Present. Development of European nationalism, liberalism, and imperialism; World War I and II; reconstruction. II; 4. Students with 95 or more credit hours receive only 3 hours credit.

131. History of England to 1688. History of the British people to 1688. I; 3. Students with 95 or more credit hours receive only 2 hours credit.

132. History of England, 1688 to the Present. Modern history of the United Kingdom; colonial and imperial development. II; 3. Students with 95 or more credit hours receive only 2 hours credit.

151. History of the United States to 1865. Colonial foundations, the movement for independence, early years of the Republic. I; 3. Prerequisite: Sophomore standing.

152. History of the United States, 1865 to the Present. A century of national life and organization. I; 3. Prerequisite: Sophomore standing.

181. The Ancient World. Ancient empires and Greece. I; 3. Prerequisite: Sophomore standing.

182. The Ancient World. Rome. II; 3. Prerequisite: Sophomore standing.

Humanities

101. Values in Literature. A general education course designed to guide the student to an understanding and appreciation of values in literature, and the relationship between recent literature and the classics. Assigned works are selected to illustrate and clarify problems in literary appreciation. Literary types studied include poetry, fiction, drama, and the film. Credit is not given for Humanities 101 in addition to English 101, 102, or 103. This course, plus Humanities 102, satisfies the general education requirement in the humanities. I; 4.

102. Values in Literature. A general education course designed to guide the student to an understanding and appreciation of values in literature and

the classics. Assigned works are selected to illustrate and clarify problems in literary appreciation. Literary types studied include poetry, fiction, drama, and the film. Credit is not given for Humanities 102 in addition to English 101, 102, or 103. This course, plus Humanities 101, satisfies the general education requirement in the humanities. II; 4. Prerequisite: Humanities 101.

151. The Heritage of Western Culture. A study of literary masterpieces representing significant contributions to the thinking of the Western World on topics of man's fate and his personal adjustment to life. Credit is not given for Humanities 151 in addition to English 101, 102, or 103. This course, plus Humanities 152, satisfies the general education requirement in the humanities. I; 4. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

152. The Heritage of Western Culture. A study of literary masterpieces representing significant contributions to the thinking of the Western World in relation to the state and society. Credit is not given for Humanities 152 in addition to English 101, 102, or 103. This course, plus Humanities 151, satisfies the general education requirement in the humanities. II; 4. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

Hygiene

101. Personal and Environmental Hygiene. This course or Hygiene 104 is required of all undergraduate men and women during their first year of residence. I, II; 2. Students with 95 or more credit hours receive only 1 hour credit. Students who expect to take Hygiene 110 should fulfill the undergraduate hygiene requirement by taking Hygiene 104 instead of Hygiene 101.

104. Personal and Community Health. This course or Hygiene 101 is required of all undergraduate men and women during their first year of residence. I, II; 2. Students with 95 or more credit hours receive only 1 hour credit. Students who expect to take Hygiene 110 should take Hygiene 104 (the prerequisite). Hygiene 104 is a more comprehensive course than Hygiene 101 for those interested in a more intensive study of personal and community hygiene. It is especially designed for teachers, coaches, social workers, and others who feel they will need this course in their future professional work.

110. Public Health. Material presented deals with information about community public health problems and the programs designed to prevent disease and promote health education. This is especially valuable for all people who go into health professions or related community work. Field trips and surveys supplement class work. Teachers, coaches, social workers will need this course in their future professional work. I, II; 2. Students with 95 or more credit hours receive only 1 hour credit. Prerequisite: Hygiene 104.

Management

101. Industrial Organization and Management. Organization plans, administrative policies, and management problems with special attention to manu-

facturing units. I, II; 3. Prerequisite: Economics 102, or 108, or consent of Associate Dean of the college; forty-five credit hours.

Marketing

101. Principles of Marketing. The functions, commodities, and middlemen involved in the marketing of goods and services; the policies and problems involved in the operation of market institutions. I, II; 3. Prerequisite: Economics 102, or 108, or consent of Associate Dean of the college; forty-five credit hours.

Mathematics

101. Basic Mathematics. A systematic presentation of the fundamentals of arithmetic, algebra, plane geometry, trigonometry, and statistics. For Liberal Arts and Science students only. Required of students in the general curriculum of the College of Liberal Arts and Sciences whose entrance credits do not include one year of algebra and one year of plane geometry. II; 3.

102. Basic Mathematics. Continuation of Mathematics 101. I; 3. Prerequisite: Mathematics 101.

103. Introduction to College Algebra. I, II; 3. Students having 1½ entrance units in algebra receive no credit. Students with 95 or more credit hours receive no credit.

104. Elements of Algebra and Trigonometry. For premedical students who have entered with only one unit of high school algebra, and who need credit in trigonometry as a prerequisite to physics. This course does not serve as a prerequisite for Mathematics 122. Premedical students who enter with 1½ units of algebra must take Mathematics 114. I, II; 3. Prerequisite: High school algebra, 1 unit; plane geometry, 1 unit.

106. Solid Geometry. Satisfies deficiency in solid geometry for engineering students; all other students receive full credit. I, II; 3. Prerequisite: Entrance algebra, 1 unit; plane geometry, 1 unit.

108. Elementary Plane Geometry for Veterans. This course deals with the usual topics of high school geometry. It is designed as a refresher course for veterans who are deficient in this area of basic mathematics. Students may meet entrance requirements for the Colleges of Commerce and Engineering through this course. I, II; no credit.

109. Fundamentals of Mathematics. For students who do not specialize in mathematics. A survey of the character of mathematics as a subject and of its relations to science, art, philosophy, and knowledge in general. Mathematics 109 and 110 meet the physical science requirement in general education in Liberal Arts and Sciences. I, II; 4. Prerequisite: Consent of the department.

110. Fundamentals of Mathematics. For students who do not specialize in mathematics. A survey of the character of mathematics as a subject and of its relations to science, art, philosophy, and knowledge in general. Mathematics 109 and 110 meet the physical science requirement in general education in Liberal Arts and Sciences. II; 4. Prerequisite: Mathematics 109.

112. College Algebra. I, II; 3. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: Entrance algebra, 1½ units, or Mathematics 103; plane geometry, 1 unit, or Mathematics 108.

114. Plane Trigonometry. I, II; 2. Students with 95 or more credit hours receive only 1 hour credit. Prerequisite: Entrance algebra, 1½ units, or Mathematics 103; plane geometry, 1 unit, or Mathematics 108.

117. Combined Freshman Mathematics. A combined course integrating all the usual topics of algebra, trigonometry, and analytic geometry, and also some topics of differential calculus. For students of chemistry, chemical engineering, ceramic engineering, ceramics, and architecture. I; 5. Prerequisite: Entrance algebra, 1½ units; plane geometry, 1 unit.

122. Analytic Geometry. Plane and solid analytic geometry. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Mathematics 111 or 112, and 114 or 115.

123. Analytic Geometry. Plane and solid analytic geometry. I, II; 5. Students with 95 or more credit hours receive only 4 hours credit. Prerequisite: Mathematics 111 or 112, and 114 or 115.

127. Combined Freshman Mathematics. Continuation of Mathematics 117. I, II; 4. Prerequisite: Mathematics 117.

132. Calculus. First course for students of mathematics and engineering. I, II; 5. Prerequisite: Mathematics 122.

133. Calculus. First course for students of mathematics and engineering. I, II; 3. Prerequisite: Mathematics 122 or 123.

137. Calculus. For students of chemistry, chemical engineering, ceramics, ceramic engineering, and architecture. I; 3. Prerequisite: Mathematics 117 and 127, or consent of department.

142. Calculus. Second course for students of mathematics and engineering. I, II; 3. Prerequisite: Mathematics 132.

143. Calculus. Second course for students of mathematics and engineering. I, II; 5. Prerequisite: Mathematics 133.

147. Calculus. Continuation of Mathematics 137. II; 3. Prerequisite: Mathematics 137.

161. Statistics. II; 3. Prerequisite: Mathematics 111 or 112; sophomore standing.

341. Differential Equations. II; 3. Prerequisite: Mathematics 132 and 142, or 137 and 147.

Mechanical Engineering

171. Mechanism. A study of the transmission and modification of motion by linkwork, cams, gears, belts, ropes, chains, etc.; theory of gear tooth action; gear tooth systems and production methods; point paths, displacement diagrams. I, II; 2. Prerequisite: General Engineering 101; registration in Physics 103.

182. Manufacturing Processes. Foundry practice; pattern design; hot and cold forming. Welding and allied processes; machine tools and machining practice; use of jigs, fixtures, and tools for manufacture of interchangeable

parts. Classroom discussion and demonstrations. I, II; 3. Prerequisite: Sophomore standing in aeronautical engineering or consent of instructor.

183. Materials Casting. Casting as a process of fabrication; the molding process including machine molding; molding sands characteristics, control, and testing. Melting and pouring practice. Physical characteristics of cast materials, advantages and disadvantages; tray iron structures and elementary metallurgical concepts; design of wood and metal patterns and correlation with foundry practice; core requirements control and testing. I, II; 3. Prerequisite: General Engineering 101 or 104; sophomore standing.

184. Metal Processing. Basic machining processes used for metal processing. Use of machine tools, jigs, fixtures, gages, and measuring instruments and inspection methods to produce interchangeable metal parts. I, II; 3. Prerequisite: General Engineering 101 or 104; sophomore standing.

209. Thermodynamics and Heat Transfer. Thermodynamic analysis of energy transfer and transformation. Properties of simple working substances. Analysis of open and closed systems, direct and reverse cycles, and processes involving transfers of mass and energy. Basic laws of heat transfer. I, II; 3. Prerequisite: Physics 108; Mathematics 142 or 143.

Military Science and Tactics

101. Freshman Basic Drill and Theory. Basic military instruction to include military policy, military organization, evolution of warfare, maps, and leadership, drill, and command. I; 1. Prerequisite: Approval of department.

102. Freshman Basic Drill and Theory. Basic military instruction to include military psychology and personnel management, geographical foundations of national power, military problems of the United States, and leadership, drill, and command. II; 1. Prerequisite: Military Science 101 or equivalent.

103. Sophomore Basic Drill and Theory. Basic infantry instruction to include leadership, drill, and exercise of command, organization of infantry units, weapons, marksmanship, technique of fire of rifle squad, combat formations, scouting and patrolling, tactics of rifle squad. I; 1. Prerequisite: Military Science 102 or equivalent.

104. Sophomore Basic Drill and Theory. Continuation of Military Science 103. II; 1. Prerequisite: Military Science 103 or equivalent.

205. Infantry Junior Drill and Theory. Advanced instruction in infantry to include leadership, drill and exercise of command, organization, weapons, gunnery, communications, combat intelligence, estimate of situation and combat orders, field fortifications, and tactics of rifle and heavy weapons platoon and companies. I; 3. Prerequisite: Military Science 104 or equivalent approved by head of department and institution.

206. Infantry Junior Drill and Theory. Continuation of Military Science 205. II; 3. Prerequisite: Military Science 205.

235. Corps of Engineers Junior Drill and Theory. Advanced instruction in Corps of Engineers to include bridge design and classification, engineer signal communications, engineer combat intelligence, engineer supply,

military roads and runways, organization of engineer units, organization of combat divisions, tactics of engineer units, vehicle operations and maintenance, water supply and individual weapons and marksmanship. I; 3. Prerequisite: Military Science 134 or equivalent. Open to students pursuing any engineering curricula or applied course such as geology, chemistry, physics, etc.

236. Corps of Engineers Junior Drill and Theory. Continuation of Military Science 235. II; 3. Prerequisite: Military Science 235.

Philosophy

101. Introduction to Philosophy. Discussion of problems in the field of morals, art, and knowledge, with selected readings from philosophers whose views have been influential in Western culture. I, II; 3. Prerequisite: Sophomore standing.

102. Logic. Reasoning, detection of fallacies, evidence. I, II; 3. Prerequisite: Sophomore standing.

105. Moral Ideas and Practice. I, II; 2. Credit is not given for both Philosophy 103 and 105. Prerequisite: Sophomore standing.

Physical Education for Men

101. Prescribed Exercise. Prescribed ameliorative exercises adapted to individual needs, capacities, and interests. I, II; 1.

102. Prescribed Exercise. Prescribed ameliorative exercises adapted to individual needs, capacities, and interests. I, II; 1.

103. Prescribed Exercise. Prescribed ameliorative exercises adapted to individual needs, capacities, and interests. I, II; 1.

104. Prescribed Exercise. Prescribed ameliorative exercises adapted to individual needs, capacities, and interests. I, II; 1.

106. Developmental Activities. Activities that contribute to the development and maintenance of physical fitness according to social and hygienic standards. I, II; 1.

108. Beginning Swimming. Skills, knowledge, attitudes, and conditions. S; 1. Open to non-swimmers.

112. Individual Tumbling Stunts. Skills, knowledge, attitudes, and conditions. I, II; 1.

113. Double Tumbling Stunts. Skills, knowledge, attitudes, and conditions. I, II; 1.

114. Apparatus Stunts. Skills, knowledge, attitudes, and conditions. I, II; 1.

117. Boxing. Skills, knowledge, attitudes, and conditions. I, II; 1.

118. Wrestling. Skills, knowledge, attitudes, and conditions. I, II; 1.

120. Personal Defense Activities. Skills, knowledge, attitudes, and conditions. I, II; 1.

123. Weight Lifting. Skills, knowledge, attitudes, and conditions. I, II; 1.

129. Volleyball. Skills, knowledge, attitudes, and conditions. I, II; 1.

130. Basketball. Skills, knowledge, attitudes, and conditions. I, II; 1.

132. Archery. Skills, knowledge, attitudes, and conditions. I, II; 1.

136. Badminton. Skills, knowledge, attitudes, and conditions. I, II; 1.

139. Backyard Sports. Skills, knowledge, and conditions. I, II; 1.

140. Boating and Fishing. I, II; 1. Prerequisite: Two hours of credit in physical education and a score on the physical fitness test that allows the student a free choice of activities or approval of the Director of Physical Education.

143. American Square Dance. I, II; 1.

150. Professional Orientation. Introduction to the fields of physical education, athletics, health, safety, recreation. For physical education majors. I, II; 2.

151. Beginning Basketball. Introductory skills, rules, and strategy. For physical education majors. I, II; 2.

152. Beginning Football. Introductory skills, rules, and strategy. For physical education majors. I, II; 2.

153. Physical Conditioning Programs. Physical fitness tests; calisthenics, medicine ball, bulldozer, grass, all-out and locomotor exercises; leadership techniques. For physical education majors. I, II; 2.

159. Camp Counseling. Objectives, administration, counseling, activity programs, evaluation. I, II; 3.

Physical Education for Women

100. Conditioning Activities. I, II; 1.

101. Individual Gymnastics. Recommendation from the Department of Health Service is necessary for registration in this course. I, II; 1.

102. Modified Activities. Prescribed recreational sports, relaxation, and exercise. I, II; 1. Prerequisite: Recommendation from the Department of Health Service.

105. Elementary Rhythms. I, II; 1.

106. Intermediate Rhythms. I, II; 1. Prerequisite: Physical Education for Women 105 or consent of instructor.

107. Advanced Rhythms. An opportunity for those who have completed previous work to further their skills in muscular control and extend their creative interests and appreciations of art through the medium of the dance. I, II; 1. Prerequisite: Physical Education for Women 105 and 106, or consent of instructor.

110. Elementary Swimming. S; 1.

123. Basketball. I, II; 1.

124. Volleyball. I, II; 1.

125. Softball. I, II; 1.

130. Badminton. I, II; 1.

131. Golf. Personal equipment to be furnished by student. I, II; 1.

132. Bowling. S; 1.

135. Archery. I, II; 1.

140. Boating and Fishing. Open to students who have completed two semesters of physical education. I, II; 1.

141. Tumbling and Apparatus Stunts. The side horse, parallel bars, stall bars, buck, etc., are used to develop skills in balance and coordination on apparatus. Attention is directed toward safety factors necessary in utilizing this equipment. Forward rolls, backward rolls, group and individual stunts are used. I, II; 1.

143. American Square Dance. I, II; 1.

144. Elementary Folk Dance. I, II; 1.

Physical Science

101. Introduction to the Physical Sciences. A course designed to meet the general education requirements in physical science. The more important principles of physics, chemistry, geology, and other branches of physical science are introduced and co-ordinated in order to give the non-science student an understanding and appreciation of the field. Credit will not be given for both Physical Science 101-102 and Division of General Studies 141-142. Credit will not be allowed to a student who has credit in general chemistry, physics, or geology. I; 4. Prerequisite: Two units of high school mathematics or consent of the department.

102. Introduction to the Physical Sciences. A course designed to meet the general education requirements in physical science. The more important principles of physics, chemistry, geology, and other branches of physical science are introduced and coordinated in order to give the non-science students an understanding and appreciation of the field. Credit will not be given for both Physical Science 101-102 and Division of General Studies 141-142. Credit will not be allowed to a student who has credit in general chemistry, physics, or geology. II; 4. Prerequisite: Two units of high school mathematics or consent of the department.

Physics

101. General Physics (Mechanics, Sound, and Heat). Lectures with demonstrations, recitations, and laboratory. For students in arts and sciences, and architecture. I, II; 5. Prerequisite: Mathematics 114 or 117.

102. General Physics (Light, Electricity, and Magnetism). Lectures with demonstrations, recitations, and laboratory. For students in arts and sciences, and architecture. I, II; 5. Prerequisite: Physics 101.

105. Nurses' Physics. Primarily for students in nursing education. Those basic principles of physics that are pertinent to the training and routine of nurses in both institutional and private service. A lecture and problem course with emphasis on selected recent developments in nuclear physics and radioactive tracers. Lecture-demonstrations and quiz. I, II; 4. Prerequisite: Sophomore standing or consent of instructor.

106. General Physics (Mechanics). Lectures with demonstrations, recitations, and laboratory. For students in engineering, mathematics, physics, and chemistry. I, II; 4. Prerequisite: Credit or registration in Mathematics 133.

107. General Physics (Electricity, Magnetism, and Modern Physics). Lectures with demonstrations, recitations, and laboratory. For students in engineering, mathematics, physics, and chemistry. I; 4. Prerequisite: Physics 106; credit or registration in Mathematics 143.

108. General Physics (Heat, Sound, Light, and Modern Physics). Lectures with demonstrations, recitations, and laboratory. For students in engineering, mathematics, physics, and chemistry. II; 4. Prerequisite: Physics 106; credit or registration in Mathematics 143.

341. Electricity and Magnetism. Lectures, problems, and laboratory. This course is fundamental to advanced courses and should be elected as early as possible by those intending to specialize in physics. Fundamental laws logically developed and summarized in Maxwell's equations. Forces and energies associated with electric and magnetic properties of matter. Generation and propagation of electromagnetic waves. I; 4. Prerequisite: General physics and calculus.

Political Science

103. Introduction to Political Science. A course designed to acquaint the student with basic concepts of political science. Topics to be covered will include the following: scope and method of political science; constitutions and forms of government; nature and problems of democracy; the making, control, and execution of public policy. I; 3.

104. Introduction to International Politics. This is designed as a survey course. Topics to be covered will include the following: the development of the world system of states; the international political and economic struggle for power; the determination and conduct of foreign policy; problems involved in maintaining peace, and organizations devoted to its maintenance. II; 3.

150. American Government: Organization and Powers. Historical development and organization of national, state, and local governments; the federal system; national and state constitutions; civil and political rights; party system; nature, structure, powers, and procedure of legislative, executive, and judicial departments in state and nation. I, II; 3. Prerequisite: Sophomore standing.

151. American Government: Functions. Functions of national, state, and local governments; foreign relations and national defense; taxation and finance; law enforcement; police power; regulation of commerce, communications, and business; promotion of social and economic welfare; current problems. I, II; 3. Students may not receive credit for both Political Science 151 and 101 and 102. Prerequisite: Sophomore standing; Political Science 150 or consent of the department.

Psychology

100. Introduction to Psychology. Introductory analysis and description of human behavior with special reference to observation, learning, memory, thinking, emotional life, and personality development. Major emphasis is placed upon psychological principles as they relate to daily life and everyday problems. I, II; 4. Prerequisite: Sophomore standing.

125. An Introduction to the Fields of Psychology. An introduction to the basic fields of psychology including the history of psychology, developmental psychology with an emphasis on the socialization of the child, individual differences, industrial, social, abnormal, and physiological psychology. I; 4. Students taking this course may not take Psychology 220 at the Urbana campus for credit. Prerequisite: Psychology 100, or equivalent, or junior standing.

135. Statistical Methods in Psychology. Application of elementary statistical methods to psychological data. No credit for this course will be given to students who receive credit for Economics 170 or Mathematics 161. I, II; 3. Prerequisite: Psychology 100, 103, or 106.

145. Industrial Psychology. A consideration of socio-psychological principles of behavior in business and industry and of the scientific methods of investigation in this area, and a survey of specific methods of personnel technology. II; 3. Prerequisite: Psychology 100.

150. Personality and Human Relations. An introduction to the study of personality in relationship to the social environment. Application of psychological principles to social problems. II; 3. Prerequisite: Psychology 100 or equivalent.

Rhetoric

100. Freshman Remedial Rhetoric and Composition. Open to students who fail the placement test for admission to Rhetoric 101. Intensive review of fundamentals, with considerable practice in composition. Students passing this course will be admitted to Rhetoric 101 without further examination. I, II; no credit.

101. Freshman Rhetoric and Composition. This course provides elementary training and practice in the comprehension and expression of written and oral English. I, II; 3. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: A passing grade on the placement examination or a passing grade in Rhetoric 100.

102. Freshman Rhetoric and Composition. This course provides elementary training and practice in the comprehension and expression of written and oral English. I, II; 3. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: Rhetoric 101.

133. Expository Writing. I; 3. Prerequisite: Rhetoric 101 and 102; sophomore standing.

144. Narrative Writing. Practice in description, narrative sketches, stories. II; 3. Prerequisite: Rhetoric 101 and 102; sophomore standing.

151. Business Letter Writing. I, II; 3. Prerequisite: Rhetoric 102. This course is not counted toward a major in English.

Social Sciences

111. The Individual in Society. A general education course designed to equip the beginning student with an understanding of the nature and the role of the individual as a member of the several groupings of his social com-

munity. I, II; 4. Credit is not given for this course to a student with credit, or concurrent registration, in a course in anthropology, psychology, or sociology. Students with 95 or more credit hours receive only 3 hours credit.

112. Bases of American Life. A general education course designed to acquaint the student with the physical, economic, political, and social developments of the United States and to equip him for intelligent active participation in local and national life. I, II; 4. Credit is not given for this course to a student with credit, or concurrent registration, in Political Science 150 or 151 or History 151 or 152. Students with 95 or more credit hours receive only 3 hours credit.

113. World Patterns and World Problems. A general education course designed to bring the student to an understanding of the geographic, economic, and political bases of the present world situation. I, II; 4. Credit is not given for this course to a student with credit, or concurrent registration, in Geography 103. Students with 95 or more credit hours receive only 3 hours credit.

114. The Unity of Knowledge. A general education course designed to acquaint the student with the development of philosophical and scientific disciplines in intellectual history, and to equip him to direct his further general education by his awareness of the, integrative factors in current education and culture. I, II; 4. Prerequisite: Sophomore standing and a 3.5 average.

116. Family Living. The development of the family from early to modern times. The factors involved in the establishment and maintenance of a family. Opportunities for individual counseling. I, II; 4. Prerequisite: Sophomore standing or consent of instructor.

Sociology and Anthropology

Sociology

100. Principles of Sociology. Concerned with the scientific study of human societies. I, II; 3. Prerequisite: Sophomore standing.

130. Society and Individual Development. Nature of person and relation to institutions, social order, and development. I, II; 3. Prerequisite: Sociology 100.

140. Social Control. The methods and techniques of group social control of individuals in small groups, societies, and large publics. The innovations in methods of social control resulting from the development of the new mass media of communication. I, II; 3. Prerequisite: Sociology 100, or 104 and 105, or Division of General Studies 151 and 152.

Anthropology

102. Introduction to Anthropology: The Origin of Man and Culture. An introduction to and general survey of human origins and early man, physical anthropology, race and racism, linguistics, archaeology and the beginning of human civilization. Recommended though not required to be

taken with Anthropology 103 as a survey of the field of anthropology. I, II; 3.

103. Introduction to Anthropology: The Growth of Culture. An introduction to and survey of the development of cultures with special attention to invention, diffusion, adaptation, integration, and other processes of cultural growth as illustrated by primitive and native populations of the world. Recommended though not required to be taken with Anthropology 102 as a survey of the field of anthropology. I, II; 3.

Spanish

101. Elementary Spanish. For students who have no credit in Spanish. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. No credit toward graduation is given for Spanish 101 without 102.

102. Elementary Spanish. Continuation of Spanish 101. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Spanish 101 or one year of high school Spanish.

103. Intermediate Spanish. Rapid reading, review of grammar, composition, conversation. I, II; 4. Prerequisite: Spanish 102 or two years of high school Spanish.

104. Intermediate Spanish. Continuation of Spanish 103. I, II; 4. Prerequisite: Spanish 103 or three years of high school Spanish.

113. Elementary Composition and Conversation. Conducted largely in Spanish. May be taken concurrently with Spanish 103. Does not count toward the major in Spanish. I, II; 2. Prerequisite: Spanish 102 or two years of high school Spanish.

201. Introduction to Spanish Literature. Reading of modern authors of Spain and Spanish America. I; 3. Prerequisite: Spanish 104 or four years of high school Spanish.

202. Introduction to Spanish Literature. Reading of modern authors of Spain and Spanish America. II; 3. Prerequisite: Spanish 201 or consent of instructor.

Speech

101. Principles of Effective Speaking. Preparation and presentation of short informative and persuasive speeches, with emphasis on the selection and organization of material, methods of securing interest and attention, and the elements of delivery. I, II; 3. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: A passing grade in Rhetoric 101 placement examination or a passing grade in Rhetoric 100.

105. Voice and Articulation. A drill course for the improvement of the normal speaking voice. II; 2. Students with 95 or more credit hours receive only 1 hour credit.

107. Parliamentary Procedure. Principles and practice of parliamentary procedure. I, II; 2. Students with 95 or more credit hours receive only 1 hour credit.

111. Business and Professional Speaking. Study, preparation, and presentation of the chief types of business speeches, with special attention to conferences,

sales talks, interviews, job applications. I, II; 2. Prerequisite: Speech 101; sophomore standing.

117. Argumentation. Methods of logical analysis; the kinds and forms of argument; the adaptation of argumentative materials to audience situations; and the forms of debate. Practice debates on current subjects. I, II; 3. Prerequisite: Speech 101; sophomore standing.

141. Oral Interpretation of Literature. Principles of interpretations, analysis, and oral reading of prose literature and verse. I, II; 2. Students with 95 or more credit hours receive only 1 hour credit.

161. Fundamentals of Acting. A study of the methods of acting, with emphasis given to basic stage techniques. The role of the character in relation to the play as a whole; the intellectual and emotional values of the play and their interpretation by means of voice and acting. I, II; 3. Prerequisite: Speech 141.

164. Radio Speaking. Preparation and presentation of the chief types of radio speeches, and of the interview, round table, and discussion. Microphone experience. I, II; 2. Prerequisite: Consent of instructor.

Theoretical and Applied Mechanics

150. Analytical Mechanics (Statics). Resultants of force systems, algebraic and graphical condition of equilibrium of force systems. Analysis of forces acting on members of trusses, frames, etc. Forces due to friction. Centroids. I, II; 2. Prerequisite: Registration in Mathematics 142.

154. Analytical Mechanics (Statics and Dynamics). A combination of Theoretical and Applied Mechanics 150 and 211 with less emphasis on some topics. For electrical engineering students only. I, II; 4. Prerequisite: Registration in Mathematics 142.

156. Analytical Mechanics (Statics and Dynamics). A combination of Theoretical and Applied Mechanics 150 and 211. I, II; 5. Prerequisite: Registration in Mathematics 142.

171. Elements of Mechanics (Statics). Resultants and equilibrium of force systems; conditions of equilibrium applied to trusses, frames, etc.; forces due to friction; centroids; stress and deformation in direct tension and compression; riveted and welded joints; properties of materials. For architects only. I, II; 3. Prerequisite: Mathematics 122.

172. Strength of Materials. Relationships between external forces acting on beams and the stresses produced; shear, moment, slope, and deflection diagrams; moment of inertia; columns. For architects only. I, II; 3. Prerequisite: Theoretical and Applied Mechanics 171.

211. Analytical Mechanics (Dynamics). Displacement, velocity, and acceleration of a particle; relation between forces acting on rigid bodies and the changes in motion produced; translation; rotation; plane motion; solutions using the principles of force, mass, and acceleration, work and energy, and impulse and momentum. I, II; 3. Prerequisite: Theoretical and Applied Mechanics 150.

221. Resistance of Materials. Relationships between external forces acting on elastic bodies and the stresses and deformations produced; tension and com-

pression members; members subjected to torsion and to bending; columns; combined stresses; properties of materials. I, II; 3. Prerequisite: Theoretical and Applied Mechanics 150, 154, or 156.

223. Resistance of Materials Laboratory. Tests of steel, cast iron, aluminum alloys, concrete, and wood; determination of such mechanical properties as strength, hardness, ductility, energy, resistance, engineering significance of mechanical properties. I, II; 1. Prerequisite: Registration in Theoretical and Applied Mechanics 221.

Calendar

CHICAGO UNDERGRADUATE DIVISION

1954 — First Semester

Sept. 8, Wed. — Sept. 15, Wed. . . . . Orientation Period
Sept. 16, Thurs. — Sept. 18, Sat. . . . . Registration
Sept. 20, Mon. . . . . Instruction Begins
Nov. 24, Wed., 6 p.m. . . . . Thanksgiving Vacation Begins
Nov. 29, Mon., 8 a.m. . . . . Thanksgiving Vacation Ends
Dec. 3, Fri. . . . . Illinois Day (State admitted to the Union, 1818)
Dec. 22, Wed., 6 p.m. . . . . Christmas Vacation Begins
Jan. 3, Mon., 8 a.m. . . . . Christmas Vacation Ends
Jan. 14, Fri. — Jan. 22, Sat. . . . . Semester Examinations

1955 — Second Semester

Jan. 31, Mon. — Feb. 2, Wed. . . . . Orientation Period
Feb. 3, Thurs. — Feb. 5, Sat. . . . . Registration
Feb. 7, Mon. . . . . Instruction Begins
Mar. 2, Wed. . . . . University Day (University opened, 1868)
Apr. 7, Thurs., 6 p.m. . . . . Easter Vacation Begins
Apr. 13, Wed., 8 a.m. . . . . Easter Vacation Ends
May 6, Fri. . . . . Honors Day
May 30, Mon. . . . . Memorial Day
May 31, Tues. — June 8, Wed. . . . . Semester Examinations

1955 — Summer Session

June 17, Fri. — June 18, Sat. . . . . Registration
June 20, Mon. . . . . Instruction Begins
July 4, Mon. . . . . Independence Day
Aug. 12, Fri. — Aug. 13, Sat. . . . . Summer Session Examinations

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Perry L. Smithers ..... Manager
Public Relations
David T. Wiant ..... Personnel Officer

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1953-1954

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Caveny, Charles C., Dean of the Undergraduate Division in Chicago, with the rank of Professor
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Hackett, Robert P., Ph.D., Professor of Accountancy and Associate Dean of Commerce and Business Administration
Hopkins, Dwight L., Ph.D., Professor of Biological Sciences and Chairman of the Division
Jones, John O., M.S., Professor of Physical Education for Men and Director of the Division
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McEldowney, Harold B., B.S., Professor of Architecture and Head of the Department
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Railsback, Ora L., Ph.D., Professor of Physics and Head of the Department
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Vest, Eugene B., Ph.D., Professor of English and Acting Chairman of the Humanities Division

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Schuyler, William M., Ph.D., Associate Professor of Foreign Languages
Shapiro, Samuel E., B.S., Associate Professor of General Engineering
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Grisamore, Thomas L., M.D., Assistant Professor of Hygiene and Medical Adviser for Men
Hartley, Miles C., B.Mus., Ph.D., Assistant Professor of Mathematics

Hartoch, Arnold J., Ph.D., Assistant Professor of Foreign Languages and Assistant to the Dean of Liberal Arts and Sciences
Heilman, Ann E., Ph.D., Assistant Professor of Social Sciences
Hilker, Mrs. Gloria, M.D., Assistant Professor of Hygiene and Medical Adviser for Women
Holladay, Mrs. Dee M., B.S., Assistant Professor of General Engineering
Hunt, Charles K., Ph.D., Assistant Professor of Physical Sciences
Jessup, Major Maurice E., B.S., Assistant Professor of Military Science
Jones, Stanley L., Ph.D., Assistant Professor of Social Sciences
Kabbes, S. Madonna, M.B.A., C.P.A., Assistant Professor of Accountancy
Kenny, Mrs. Anna W., Ph.D., Assistant Professor of English
Kostka, Helen M., M.D., Assistant Professor of Hygiene and Medical Adviser for Women
Kromhout, Robert A., Ph.D., Assistant Professor of Physics
Lease, Benjamin, Ph.D., Assistant Professor of English
Lein, Marie E., Ph.D., Assistant Professor of Foreign Languages
Leonhard, Zelma B., Ph.D., Assistant Professor of English
Madison, Kenneth M., Ph.D., Assistant Professor of Biological Sciences
Mansfield, Victor, Ph.D., Assistant Professor of Physical Sciences
Marsh, John O., Jr., Ph.D., Assistant Professor of Foreign Languages
McCall, Bevode C., A.M., Assistant Professor of Social Sciences
McNee, John D., Jr., A.M., Assistant Professor of Art
McNulty, Captain John N., A.B., Assistant Professor of Military Science
Mikolajczyk, Henry L., A.M., Assistant Professor of Architecture and Associate Architect
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Instructors

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Berglund, Winifred V., A.M., Instructor in Mathematics
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Larson, Carl M., M.B.A., Instructor in Economics
Lazar, Mrs. Flo E., A.M., Instructor in Physical Education for Women
Lenihan, Mrs. Marion C., A.M., Instructor in Foreign Languages
Little, Ellis B., M.S., Instructor in Biological Sciences
Livermore, Ogden, A.M., Instructor in Physics

Mackin, John H., A.M., Instructor in English
Mann, William C., M.S., Instructor in Physical Education for Men and Trainer
Mart, Mrs. Dorothy J., B.S., Instructor in Physical Education for Women
Matlaw, Myron, Ph.D., Instructor in English
McGuire, Blanche B., A.M., Instructor in English
McMillan, Rosamond, M.S., Instructor in Biological Sciences
McNeil, Edward B., Ph.D., Instructor in Physics
McQuate, Nelda J., M.S., Instructor in Biological Sciences
Merten, Horace G., A.M., Instructor in English
Miller, Irving M., A.M., Instructor in English
Miller, Oscar, A.M., Instructor in Economics
Miller, Robert L., M.S., Instructor in Physical Sciences
Miller, Sonia, A.M., Instructor in English
Montcalm, Benedict W., M.S., Instructor in Physical Education for Men and Assistant Football Coach
Morris, James R., M.B.A., Instructor in Economics
Murphy, Kenneth H., M.S., Instructor in Mathematics
Mysiak, Eugene J., B.S., Instructor in General Engineering
Niederman, Sara C., A.M., Instructor in English
Nolan, Grace M., A.M., Instructor in Mathematics
Ockert, John D., M.S., Instructor in Mathematics
Oehmke, Mrs. Theresa M., A.M., Instructor in Mathematics
Olanoff, Samuel, M.S., Instructor in Physics
Oleksy, Mrs. Margaret H., A.M., Instructor in English
Olsen, Charles E., B.S., Instructor in Mathematics
Ondrak, Thomas B., M.S., Instructor in Mathematics
O'Neill, M/Sgt. Thomas M., Instructor in Military Science and Tactics
Osborn, Velva J., A.M., Instructor in Library Science and Counselor Librarian
Page, Robert R., A.M., Instructor in Social Sciences
Pinsky, Sylvia, A.M., Instructor in Foreign Languages
Potempa, Sylvester J., M.S., Instructor in Physical Sciences
Presley, Halina J., A.M., Instructor in Biological Sciences
Questiaux, Lillian M., A.M., Instructor in Physical Sciences
Rader, Richard R., A.M., Instructor in Physical Education for Men, Golf Coach, and Assistant Basketball Coach
Rennagel, William R., A.M., Instructor in Physical Sciences
Richardson, Nancy V., B.S., Instructor in Physical Education for Women
Rigler, Matthew L., M.S., Instructor in Speech and Director of Speech Clinic
Ritter, Frederick, A.M., Instructor in Foreign Languages
Ross, Dick C., M.B.A., Instructor in Accountancy
Royster, Richard S., A.M., Instructor in General Engineering
Rudin, Cecilia M., A.M., Instructor in English
Ryan, Everett D., A.M., Instructor in Physical Education for Men and Wrestling Coach
Sackheim, George I., A.M., Instructor in Physical Sciences
Schmitz, Charlotte, A.M., Instructor in Mathematics
Scholomiti, Nicholas C., A.M., Instructor in Mathematics
Schroeder, Fred W., M.S., Instructor in General Engineering
Seabright, Mrs. Frances K., M.S., Instructor in Physical Sciences
Severns, M/Sgt. Merle L., Instructor in Military Science and Tactics

Shepherd, Richard J., M.S., Instructor in Library Science and Fine Arts Librarian
Silkett, Albert F., A.B., Instructor in Physics
Skogen, Mrs. Clara S., A.B., Instructor in Foreign Languages
Snyder, Ray E., B.S., Instructor in Physics
Spirakis, Charles N., B.S., Instructor in Biological Sciences
Stelling, Mrs. Lois B., A.M., Instructor in Mathematics
Strable, Mrs. Jane S., A.B., B.S., Instructor in Library Science and Circulation Librarian
Stronks, James B., A.M., Instructor in English
Sullivan, Bernadette M., A.B., Assistant Catalog Librarian with the rank of Instructor
Teichmann, Mrs. Elizabeth, A.M., Instructor in Foreign Languages
Tighe, John P., M.S., Instructor in Physical Education for Men
Timmis, Mrs. Beatrice S., A.M., Instructor in English
Tort, Mrs. Ferdina J. C., A.M., Instructor in Foreign Languages
Turner, Lona L., M.S., Instructor in Mathematics
Tyree, Joseph, Ph.D., Instructor in Physical Sciences
Ullman, Louis L., B.S., Instructor in Physical Sciences
Versen, Walter G., B.S., Ed.M., Instructor in Physical Education for Men and Head Football Coach
Waller, Frederick O., A.M., Instructor in English
Wax, Murray, A.M., Instructor in Social Sciences
Wells, Warren, A.B., Instructor in Physical Sciences
Willett, Maurita F., A.M., Instructor in English
Williams, Henry F., A.M., Instructor in Economics
Wright, Elizabeth V., A.M., Instructor in English
Yankow, Henry G., M.S., Instructor in Accountancy

Assistants

Bedard, Irvin, B.S., Assistant in Physical Education for Men
Creaser, James W., A.M., Assistant in Psychology and Assistant Counselor in the Student Counseling Bureau
Graff, Robert F., A.B., Assistant in Accountancy
Kreidler, Robert D., B.S., Assistant in Physical Education for Men
Lundgoot, Mrs. Janet K., B.S., Assistant in Psychology and Personnel Technician in the Student Counseling Bureau
Moldenhauer, Janet E., B.S., Assistant in Physical Education for Women
Strnad, George J., B.S., Assistant in Physical Education for Men

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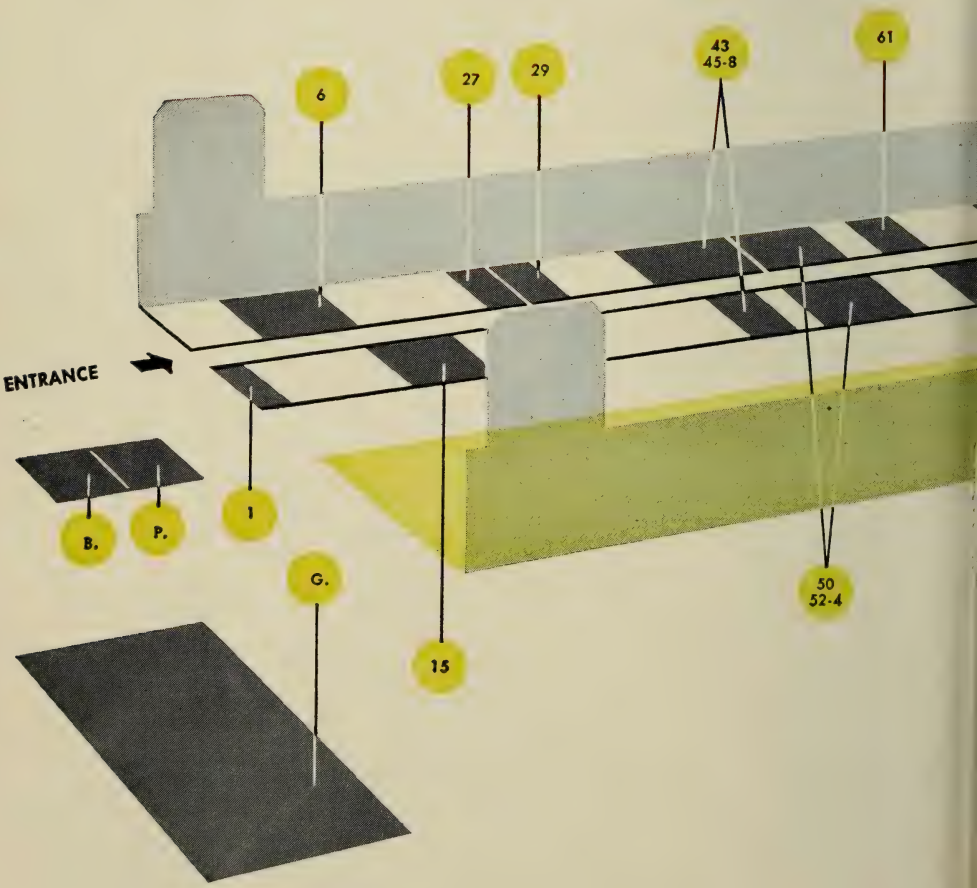
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1 IN 201-30 LECTURE ROOMS AND CLASSROOMS

6 SN 235 LOUNGE

15 AI 239 LIBRARY
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241-2 251 ARCHITECTURE ROOMS

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312 LOUNGE

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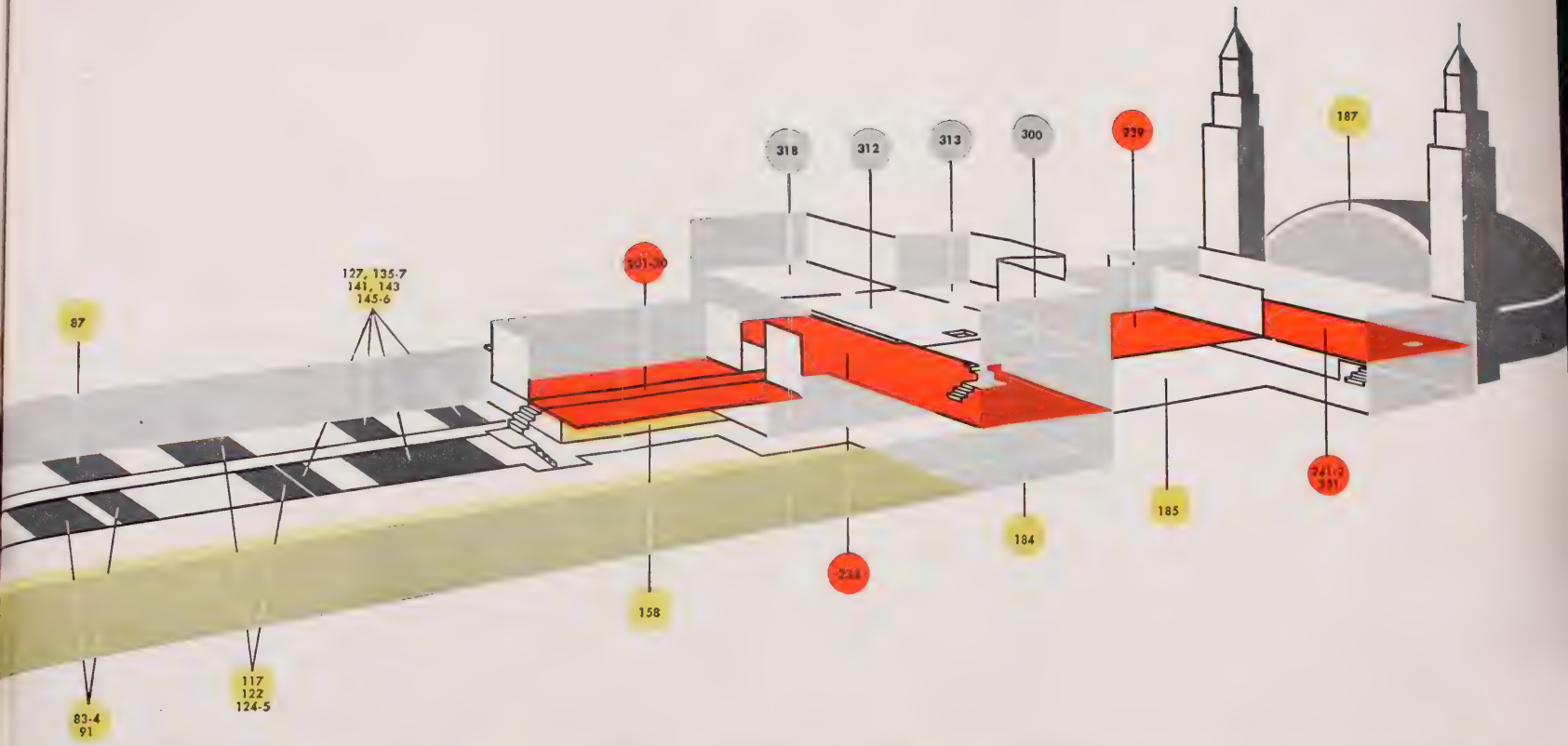
318 HEALTH SERVICE



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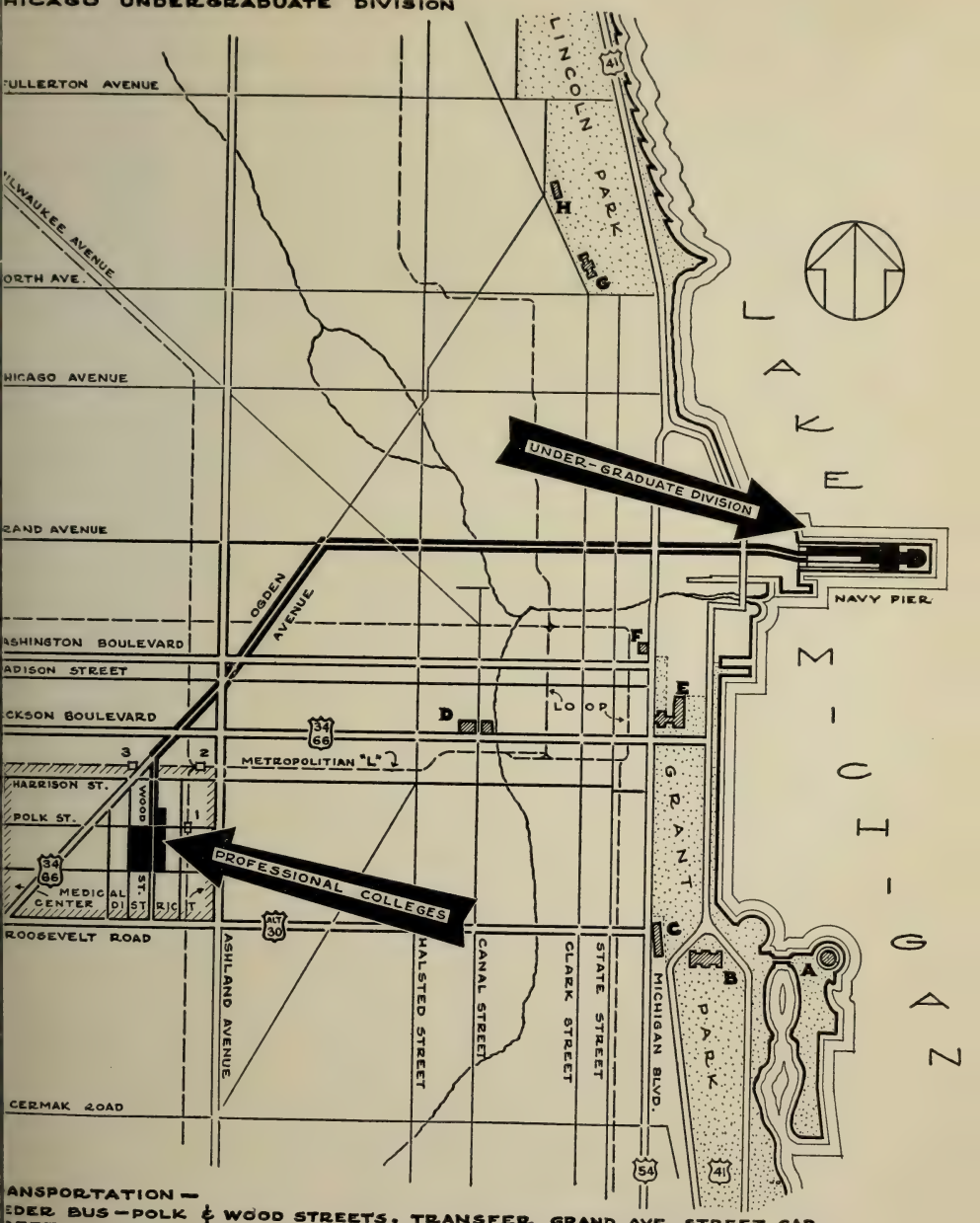

ANSPORTATION —
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REET CAR — ASHLAND CAR ON PAULINA ST., TRANSFER GRAND AVENUE.
STATIONS: 1-POLK ST. 2-MARSHFIELD 3-OGDEN AVE., ALL TRAINS TO LOOP,
ANSFER STONY ISLAND STREET CAR.

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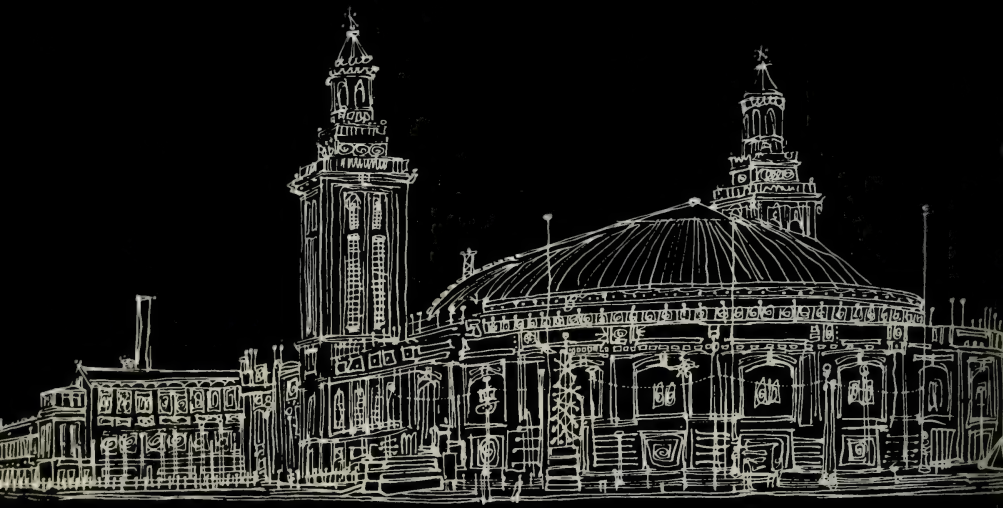

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Your University

The Chicago Undergraduate Division of the University is entering its ninth school year. Since October, 1946, this two-year branch of the University of Illinois has offered a well-rounded educational program to thousands of students who found it to their advantage to live in the Chicago metropolitan area while attending college.

Complete preprofessional freshman and sophomore courses of study are offered in the College of Liberal Arts and Sciences with a three-year curriculum for premedical students. Professional two-year curricula are available in the College of Commerce and Business Administration and the College of Engineering. In addition, architecture and architectural engineering curricula, as a part of the College of Fine and Applied Arts, are offered under the administration of the College of Engineering.

Professional curricula in physical education, teacher education, and a program leading to a Bachelor of Science degree in nursing are also available. The basic course and the first year of the advanced course in R.O.T.C. have been established for men students.

Students enrolled at the Chicago Undergraduate Division have the same status as students matriculating on the Urbana campus. Courses of instruction, the schedule of fees, and admission requirements are the same on both campuses.

Excellent instructional facilities are provided in the school's sixty-eight classrooms and thirty-three modern, fully-equipped laboratories. A 70,000-volume library, food service, well-furnished lounges, and recreational facilities supplement the academic program. A large gymnasium adjacent to the Pier houses the athletic program.

As an important part of the services of the Student Counseling Bureau, educational and vocational guidance examinations are offered to prospective students. Counseling services of the Bureau, as well as the facilities of the offices of the Dean of Students and his assistants, the Dean of Men and Dean of Women, are available to students at all times.

The Chicago Undergraduate Division, through its educational, social, and cultural program, strives to provide its student body with the same high degree of service which has been so long a part of University of Illinois tradition.

Registering for classes is a busy time and a never-to-be-forgotten experience.

Admission

THERE ARE SEVEN STEPS

In order to become a student at the Chicago Undergraduate Division of the University of Illinois, an applicant must take the following steps:

1. Obtain an application for admission. The Office of Admissions and Records of the Chicago Undergraduate Division will be glad to provide application blanks for admission in response to requests received by mail, by telephone, or in person.

2. Provide the Office of Admissions and Records with an official transcript of his record in high school and his record at *each* college or institution of higher education which he has attended since leaving high school. The applicant must assume responsibility for having these records forwarded directly to the Office of Admissions and Records, University of Illinois, Chicago Undergraduate Division, Navy Pier, Chicago 11, by an official of the school concerned.

The applicant should arrange with the registrar of his high school and of *each* college or university he has attended to have his transcripts forwarded to this office as soon as possible to permit an early evaluation of his credentials.

In addition, applicants who have been on active duty in the Armed Forces must also submit photo copies of their service separation papers.

3. Decide which college and curriculum in the University he desires to enter. To assist applicants in making this decision, the Chicago Undergraduate Division of the University offers Vocational and Educational Aptitude Examinations which are followed by professional counseling. For new freshmen, these guidance examinations are a required activity of the orientation period.

However, since the time available for counseling during the orientation period is extremely limited, these examinations are now being offered several months in advance. Appointment requests for these examinations may be made through the Office of Admissions and Records. If the applicant has any question whatsoever as to the course of study he desires to pursue in college, the University strongly urges him to take these tests and receive counseling well in advance of the orientation period.

4. Complete and return the application blank.

5. When an applicant's case is complete, that is, after his completed application blank and all necessary supporting records and transcripts have been received, the case will be evaluated. If the application is approved, the applicant will be sent a permit to enter, an appointment for such placement, guidance, and motor fitness tests as may be necessary, an appointment for a physical examination, and information as to the date and place of his college meeting and of registration. If the application is not approved, the Office of Admissions and Records will send the applicant written notice of this action, explain his deficiencies, and make suggestions as to the manner in which he may remove them and qualify for admission.

6. Report to Navy Pier for physical examination, college meeting, and tests listed in paragraph 5 above, on the dates specified in the notice which the applicant has received.

7. Register, pay tuition and fees, and start classes.

Trained interviewers interpret tests for students in the Counseling Bureau.

ADMISSION REQUIREMENTS

ADMISSION WITHOUT ENTRANCE EXAMINATIONS (BY CERTIFICATE)

I. High School Graduates

The admission requirements to the University of Illinois are divided into two groups: Group A, General University Admission Requirements, which apply to every student entering the University of Illinois; and Group B, Specific Subject Requirements for admission to a particular college and curriculum within the University, which apply to every student entering that college and curriculum.

Since each student entering the University of Illinois must enroll in a particular college and curriculum within the University, *each student must meet both sets of admission requirements*, i.e., the General University Admission Requirements and the Specific Subject Requirements for the college and curriculum of his choice.

A. GENERAL UNIVERSITY ADMISSION REQUIREMENTS

These requirements must be met by all applicants. For definition of the terms used and description of the subjects acceptable in satisfaction of the requirements, please refer to C and D below.

1. Graduation from an accredited high school.

2. An applicant must be at least sixteen years of age. This requirement may be waived for a student fifteen years of age on recommendation of the dean of the college concerned, provided the student resides with his parents or guardian, or someone selected by them while attending the University.

3. Fifteen units of acceptable secondary school work distributed as follows:

a. A minimum of nine units of work in the academic fields (English, mathematics, sciences, foreign languages, history, and social studies) including:

(1) At least three units of English.

(2) At least two majors (including English) and one minor selected from the list of acceptable majors and minors below.

Exception: The requirement of a second major is waived for applicants who rank in the upper half of their graduating class scholastically.

b. Six units from any of the high school subjects which are accepted by an accredited school toward its diploma and which meet the standards for accrediting.

B. COLLEGE SUBJECT REQUIREMENTS

Applicants must present credit in the subjects required for admission to the college and curriculum of their choice (see chart on page 12).

C. DEFINITIONS OF MAJORS AND MINORS

1. **Unit.** A unit is the equivalent of two high school credits, i.e., the value given to a course of study covering two semesters and including not less than the equivalent of 120 sixty-minute periods of classroom work. Two hours of work requiring little or no preparation outside the class are considered as equivalent to one hour of prepared classroom work. Fractional credits of the value of less than one-half unit will not be accepted. Not less than one unit of work will be accepted in a foreign language, elementary algebra, plane geometry, physics, chemistry, or biology.

2. **Major.** A major consists of a three-year sequence in one academic field.

3. **Minor.** A minor consists of a two-year sequence in one academic field.

Please note that the University's definition of a major and a minor may not be the same as that in use in your high school.

D. ACCEPTABLE MAJORS AND MINORS

The required majors and minors as defined may be selected only from the following five academic fields:

1. **English.** In all cases one major must be in English. Only courses in history and appreciation of literature, and in composition (including oral composition when given as a part of a basic English course) and grammar, will count toward this major. Four units in English, while not required for any curriculum, are recommended by all the colleges.

2. **Foreign Language.** Three units in one language constitute a major. Two units in one language constitute a minor. The acceptable foreign languages are German, French, Spanish, Italian, Latin, and Greek. Less than one unit in a language is not acceptable for admission.

3. **Mathematics.** Only courses in algebra, plane geometry and spherical geometry, and trigonometry will be accepted toward a major or a minor in this subject. (General mathematics may be accepted in lieu of algebra and geometry in cases in which the content of the course is essentially the same as that ordinarily included in algebra and geometry. However, essentials of mathematics, business or shop mathematics, and commercial arithmetic are not acceptable toward a major or minor in mathematics.)

In the College of Engineering and in the chemistry and chemical engineering curricula of the College of Liberal Arts and Sciences, students who have only one unit in algebra and one unit in geometry, and who meet all other entrance requirements, may be admitted on condition that deficiencies in advanced mathematics be removed during their first year of residence. However, this will probably extend the time required for a degree.

4. **Science.** Including physics; chemistry; biology, or botany and zoology; general science, or physiology and physiography; astronomy; and geology. The three units required for a major must include at least a total of two units chosen from one or more of the following subjects: physics, chemistry, botany, and zoology. Biology may be offered in place of botany or zoology. The two units required for a minor must include at least one unit from the above subjects.

5. **Social Studies.** This field is divided into two areas:

a. History, e.g., United States, modern, ancient, and medieval, etc. Three units required for a major must include at least two units in history. The two units required for a minor must include at least one unit in history.

b. General Social Studies, e.g., civics, economics, and sociology.

ADMISSION TO THE COLLEGE OF ENGINEERING

The mathematics requirement for admission to full freshman standing in the College of Engineering is as follows: algebra, two units; plane geometry, one unit; solid geometry, one-half unit; trigonometry, one-half unit. The College of Engineering requires a mathematics placement examination of students presenting these credits and will adjust such students' curricula in accordance with the results of the placement examination.

Students who present only one unit in algebra and one unit in geometry, and who meet all other requirements, may be admitted on the condition that the deficiencies be removed during their first year of residence, and with the understanding they cannot complete the requirements for a degree in the College of Engineering in eight semesters.

Students who do not present the four units in mathematics as specified may be admitted to full standing by passing a proficiency examination at the University which will indicate their preparation is adequate for entrance into analytical geometry.

II. Tranfer Students

A. All requirements listed in Item I, page 8. *Exception:* An applicant who is transferring from an institution rated as Class "A" by the University and who is deficient in the admission requirements listed in Item I

Required Subjects for Specific College and Curricula

Colleges	*Subjects Required for Admission*
COLLEGE OF COMMERCE AND BUSINESS ADMINISTRATION	
All Fields (Accountancy; Commerce and Law; Commercial Teaching; Economics of Government and Business, Public Utilities, and Transportation; Economic Theory; Finance; General Economics; Industrial Administration; Insurance; Labor Economics; Management; Marketing; Personnel Management; Secretarial Training; Statistical Economics)	English, 3 units Algebra, 1 unit Geometry, 1 unit
COLLEGE OF ENGINEERING	
All Curricula (Aeronautical, Agricultural, Ceramic, Civil, Electrical, General, Industrial, Mechanical, Metallurgical, Mining, Engineering Physics, Sanitary)	English, 3 units Algebra, 2 units Plane Geometry, 1 unit Solid Geometry, ½ unit Trigonometry, ½ unit (See paragraph 3, page 10)
Curricula in Architecture Design Option (for B.S. degree in Architecture); Construction Option (for B.S. degree in Architectural Engineering)	English, 3 units Algebra, 1½ units Geometry, 1 unit (See paragraph 3, page 10)
COLLEGE OF LIBERAL ARTS AND SCIENCES	
General Curriculum with majors in Bacteriology, Botany, Economics, English, French, Geography, Geology, German, History, Philosophy, Political Science, Psychology, Sociology, Spanish, Speech, Zoology. Curricula preparatory to Journalism and Law Teacher Education Curricula (not requiring Chemistry, Physics, or Mathematics) Pre-professional Curriculum in Nursing (See also Paragraph IV, Page 13)	English, 3 units Language, 2 units[1] (See paragraph 2, page 10)
General Curriculum with majors in Chemistry, Physics, Mathematics, Physiology Special Curricula preparatory to Dentistry, Medicine, Veterinary Medicine (See also Paragraph IV, Page 13)	English, 3 units Language, 2 units[1] (See paragraph 2, page 10) Algebra, 1 unit Geometry, 1 unit
Special Curriculum in Chemistry	English, 3 units Language, 2 units[1] (See paragraph 2, page 10) Algebra, 1½ units Plane Geometry, 1 unit
Special Curriculum in Chemical Engineering	English, 3 units Language, 2 units[1] (See paragraph 2, page 10) Algebra, 2 units Plane Geometry, 1 unit Trigonometry, ½ unit
Curriculum in Elementary Education	English, 3 units
Curricula preparatory to Teaching Mentally Handicapped Children and Deaf and Hard of Hearing Children (See also Paragraph IV, Page 13)	English, 3 units Algebra, 1 unit Plane Geometry, 1 unit Written approval of the Teacher Education Advisor
Continuation Program in Nursing	English, 3 units Language, 2 units[1] (See paragraph 2, page 10) Certification by Director, University of Illinois School of Nursing
SCHOOL OF PHYSICAL EDUCATION	
Curriculum for Men and Curriculum for Women	English, 3 units Written approval of the Director of Physical Education

[1] Foreign language requirement is waived for students who rank in the upper half of their high school graduating class.

may be admitted if he presents at least thirty semester hours of credit in transfer with a 3.0 average ("C") and without any failures in any college subject. However, such applicants who desire to enter either the College of Commerce and Business Administration or the College of Engineering must present credit in the minimum mathematics required for these colleges.

B. Honorable dismissal from all institutions of higher learning previously attended, and a collegiate scholastic average of at least 3.0 ("C") in terms of the University of Illinois grading system. *Exception:* An applicant whose record at some other institution comes within either of the following classifications may enter the University only on approval of the dean of the college concerned and under the conditions imposed by him:

1. An applicant on probation at, or dropped from, another institution for poor scholarship or for disciplinary reasons. (In the latter instance, he must also obtain the approval of the University Senate Committee on Student Discipline.)

2. A person whose collegiate scholastic average is less than 3.0 in terms of the University of Illinois grading system.

III. Nonresident Students

Applicants who are not residents of the state of Illinois may be admitted (if vacancies exist after all qualified resident applicants have been accommodated) provided they meet all requirements listed in Item I, page 8, and further provided that:

A. As high school graduates they ranked scholastically in the top three-quarters of their class on graduation.

B. As transfer students they present a collegiate scholastic average of at least 3.0 ("C") in terms of the University of Illinois grading system.

IV. Special Scholastic Admission Requirements

A. High school graduates who are residents of the state of Illinois and who rank in the fourth (lowest) quarter of their graduating class scholastically, if otherwise qualified, will be admitted on scholastic probation.

B. Applicants for the following special curricula must meet the scholastic minima indicated opposite each curriculum.

CURRICULUM	SCHOLASTIC REQUIREMENTS
1. Premedical	
a. High school graduates	Rank in upper half of graduating class.
b. Transfer students	3.5 collegiate average through the second semester of collegiate work. 3.75 collegiate average commencing with the fourth semester of college work.
2. Predental, Preveterinary Medicine	
a. High school graduates	Rank in upper half of graduating class.
b. Transfer students	Collegiate average of 3.5.
3. Preprofessional Curriculum in Nursing	
a. High school graduates	Rank in upper half of graduating class.
b. Transfer students	Collegiate average of 3.0.
4. Curricula preparatory to Teaching Mentally Handicapped Children and Deaf and Hard of Hearing Children.	
a. High school graduates	Rank in top quarter of graduating class.
b. Transfer students	Collegiate average of 3.5.

ADMISSION BY EXAMINATION

Applicants who do not meet the requirements for admission listed above may qualify for admission by passing one or more examinations as outlined below. *Exception:* This section does not apply to applicants who are deficient in the scholastic requirements outlined in Items III and IV, page 13. Scholastic deficiencies may not be removed by examination—only by an improved scholastic record.

I. Entrance Examinations

Applicants who may be classified in any of the following categories may qualify for admission by passing University of Illinois entrance examinations as indicated under each category:

A. Graduates of Unaccredited High Schools

1. Applicants who rank in the top 25 per cent of their graduating class from an unaccredited secondary school which offers four years of instruction may qualify by passing an entrance examination in English composition and rhetoric and such other entrance examinations in high school subjects as may be necessary to complete admission requirements.

2. Applicants who are graduates of unaccredited secondary schools and rank below the top 25 per cent of their graduating class may qualify by passing entrance examinations for a minimum of fifteen units of secondary credit, including all courses necessary to meet University and specific college admission requirements.

B. Applicants who have attended an accredited high school, but who have not been graduated, may qualify by passing an entrance examination in English composition and rhetoric and additional entrance examinations for a total of *at least* four units of work in subjects to be designated by the University.

C. Applicants who have not completed any secondary school work may qualify by passing University of Illinois entrance examinations in all high school subjects necessary to meet general University and specific college admission requirements.

D. Applicants who do not meet University admission requirements with respect to total units of credit, total academic units, major and minors, or subjects required for admission to the college of the applicants' choice may qualify by passing University of Illinois entrance examinations in the subjects in which they are deficient.

These entrance examinations will be given three times a year, usually in September, January, and June. Applications to take these examinations must be filed in advance in the Office of Admissions and Records.

II. General Education Development Tests

Veterans of active duty with the United States Armed Forces or with the United States Maritime Service and adult non-veterans (non-veterans twenty-one years of age or older) may qualify for admission to the University by passing the United States Armed Forces Institute General Educational Development Tests under the following conditions:

A. Applicants seeking admission to the College of Liberal Arts and Sciences may qualify if their G.E.D. test scores are sufficiently high to entitle them to a scholastic rank equivalent to that of a student who has been graduated in the upper half of his class in an accredited secondary school. Applicants, whose G.E.D. scores are passing but below minimum required for upper-half classification scholastically, may qualify if they present credit from accredited sources in two successive years of an acceptable foreign language. Applicants desiring to enter specialized curricula in the College of Liberal Arts and Sciences for which mathematics is required (see page 12) may not qualify for such curricula by G.E.D. tests alone, but must present credit from accredited sources in elementary algebra and plane geometry.

B. Applicants seeking admission to the College of Commerce and Business Administration or the College of Engineering may qualify by passing the G.E.D. tests and presenting credit from accredited sources in the required mathematics.

C. Applicants seeking admission to the School of Physcial Education may qualify by passing the G.E.D. tests and securing the approval of the Director of Physical Education.

Tuition and Fees

Semester Fees

Tuition and fees are due and payable in full when the student registers.

Tuition. Illinois residents (except those holding scholarships) registering in nine semester hours or more pay tuition of..... $ 65.00

Nonresidents registering in nine semester hours or more pay tuition of 175.00

Students taking eight semester hours or less pay $5 per semester hour if residents of Illinois, or $12 per semester hour if nonresidents.

Hospital and Medical Service Fee. All students registering in six semester hours or more pay as insurance for hospital and medical service a fee of..... 7.00

Laboratory, Library, and Supply Fee. All students registering in nine semester hours or more pay a laboratory, library, and supply fee of..... 11.00

Students registering for less than nine hours pay $5.50.

Student Activities Fee. All students registering in six semester hours or more pay a student activities fee of..... 6.00

Deposits. Each student must make a deposit of $5 at the time of his first registration. An additional deposit of $10 ($15 in all) is required of students withdrawing military equipment. Chargeable against these deposits are such items as unreturned towels and locks, lost library books, library fines, shortages in laboratory, military, and other equipment, etc. Whenever the amount of the $5 deposit falls below $2.50 or the amount of the $15 deposit falls below $12.50, the student will be required immediately by additional deposit to bring the total up to $5 and $15, respectively. Any balance in deposit will be returned to the student in case he officially withdraws from the University. This refund of deposit will be made after the close of registration for the next regular semester following the student's withdrawal. The $10 military deposit will be returned to the student, upon receipt of the military equipment, at the end of each school year.

Identification Card. Each student, on payment of tuition and fees each semester, is given an identification card for use in obtaining loans of library books, locks, towels, and other equipment.

Summer Session Fees

Tuition and fees are due and payable in full when the student registers.

Tuition. Illinois residents (except those holding scholarships) registering in five semester hours or more pay tuition of.....$32.50

Nonresidents registering in five semester hours or more pay tuition of 87.50

Students taking four semester hours or less pay $5 per semester hour if residents of Illinois, or $12 per semester hour if nonresidents.

Hospital and Medical Service Fee. All students registering in four semerster hours or more pay as insurance for hospital and medical service a fee of..... 3.50

Laboratory, Library, and Supply Fee. All students registering in five semester hours or more pay a laboratory, library, and supply fee of 5.50

Students taking less than this amount of instruction pay $2.25 for the summer session.

Student Activities Fee. All students registering in four semester hours or more pay a student activities fee of..... 3.00

Refunds of Tuition and Fees

In case a student withdraws from the University[1] during the first ten days of instruction, the total amount of his tuition and fees will be refunded. After ten days and before the middle of the semester, a rebate of one-half the tuition and fees will be made. After the middle of the semester, no rebate will be allowed. In the summer term, the total amount of the tuition and fees paid will be refunded if withdrawal occurs within the first five days; one-half the amount after the first five days but within the first four weeks; and nothing after the beginning of the fifth week. If a student withdraws from one or more courses thereby reducing his study load to eight or less semester hours in the regular semester or four or less hours in the summer session, a pro rata refund of tuition and fees will be made according to the rebate schedule, provided that such a reduction of study load occurs during the full rebate period.

Miscellaneous Fees

Service Charge for Deferred Fees. A service charge of ten per cent of the amount of fees deferred, but not to exceed $3 a semester, is assessed for the privilege of deferring fees, and this charge must be paid on the day of registration. If deferred fees are paid within ten days after registration, the service charge is refunded *except* that a minimum service charge of $1 is retained by the University in all cases. The general

[1] Students leaving the University before the end of a semester or session should initiate withdrawal papers at the office of the dean of their college. Failure to do so will result in the student being dropped for poor scholarship at the end of the semester.

deposit of $5 (if this deposit has not previously been paid), the service charge, and all charges from previous semesters must be paid on the day of registration. Arrangements for deferred fees are made directly with the cashier.

Change Fee. For every change of program approved later than noon of the second Monday following registration the fee is $1.00

Transcript Fee. Each student who has paid all his University fees is entitled to receive, without charge, one transcript of his record. For each additional transcript the fee is 0.50

Late Registration Fee. Former students who register after the regular registration days in either semester pay a late registration fee of 5.00

Special Examination Fee. For any special examination to remove a failure the fee is 5.00

Fee to Audit Courses. Persons not connected with the University who attend classes as listeners pay for each course 7.50

Veterans' Information

The Chicago Undergraduate Division has been approved to offer training under the following veterans educational benefits acts: Public Law 346, the World War II G.I. Bill; Public Law 550, the Korean G.I. Bill; and Public Laws 16 and 894, the Vocational Rehabilitation Acts. Questions concerning benefits under these laws may be referred to the Veterans Section, Office of Admissions and Records.

The University of Illinois has established the Office of Veterans Counselor in the Dean of Men's office, Room 313. As a collateral duty, the Dean of Men gives special attention to the particular problems of veterans.

I. Authorization

To enroll under one of the above benefits at the Chicago Undergraduate Division, an applicant, in addition to applying for admission to this Division, must take the following steps:

A. Determine the course in which he will register and the highest degree toward which he plans to work. If there is any doubt as to the final vocational objective or the course to follow to reach it, some type of educational and vocational counseling should be received before completing application to the Veterans Administration.

B. Make application to the Veterans Administration, 2030 West Taylor Street, Chicago, for the proper training authorization. A copy of service separation papers must accompany this application. Applications should be filed as early as possible, and not later than the first day of classes.

1. Applications for Public Laws 346, 16, and 894, must show the exact college and curriculum in which the veteran will register.

2. Applications for Public Law 550 need show as the goal only the highest degree desired, e.g., bachelor's degree, master's degree. Titles such as Bachelor of Science, Master of Arts, etc., should not be specified unless the applicant is certain that is the degree awarded in his course.

C. The training Certificate received from the Veterans Administration should be brought to the University on the day of registration for classes. It will not be accepted before that time. Certificates received after the beginning of classes should be turned in at once to the Veterans Section, Office of Admissions and Records, Room 15.

II. Transfers Under the G. I. Bill

Veterans transferring from another school under the G.I. Bill must obtain a notice of interruption from that school (P.L. 346 Form 7-1905e or P.L. 550 Form 7-1995) and submit it to the Veterans Administration when requesting a supplemental training certificate for this University.

A. Applications for transfer under P.L. 346 must reach the Veterans Administration before the veteran interrupts his course at his previous school.

B. Veterans transferring between divisions of the University of Illinois must follow the above procedure for changing schools if they are authorized under P. L. 550. Veterans under P. L. 346 may use the same Certificate if transferring between the Chicago Undergraduate Division and the Urbana campus, provided they do not change their college or curriculum and will register the succeeding semester.

III. Choice of Course

Veterans applying for any educational benefits should be extremely cautious in choosing their courses. Once a particular program is authorized by the Veterans Administration, the veteran may not alter that program without jeopardizing his benefits, particularly if he fails to do satisfactory work in the original course. If assistance in choosing the correct course is desired, the facilities of the University Student Counseling Bureau are available at all times (see page 24). The veterans Administration also will provide free counseling for any veteran.

IV. Special Provisions

A. Charges for Tuition and Fees

1. Public Law 550 requires each veteran to pay the costs of his education out of his monthly allowance. The fees listed on page 15 are payable at the time of registration for classes. The Veterans Administration will mail the first allotment check about six weeks after a veteran enters training.

2. Veterans under Public Law 346 who present a valid Certificate of Eligibility, V.A. Form 7-1953, at the time of registration will be required to pay only the $5 general deposit fee. Veterans not having the Certificate at that time will be required to pay all fees, but will receive a refund when the authorization is presented to the University. This provision also applies to veterans enrolling under Public Law 16 or 894.

B. Attendance.

The University of Illinois is required by the Veterans Administration to submit a monthly attendance report for each veteran enrolled under P.L. 550.

V. Public Laws 16 and 894

Students receiving educational benefits under either of the federal Vocational Rehabilitation Acts should be certain that there is an authorization on file for them at the University by the time they are to register for classes. Early application for training should be filed with the Veterans Administration Training Officer.

VI. Military Scholarships

Any person who served in the armed forces during World War I or any time between September 16, 1940, and the official termination of the present national emergency and received an honorable discharge may qualify for a four-year tuition scholarship if he was a resident of Illinois or a student in the University of Illinois at the time of entering service. No examination or minimum grade average is required. Information and application blanks are available from the Office of Admissions and Records, Room 15, Window E. The Military Scholarship may not be used during any period when the veteran is receiving financial aid for his education from the federal government.

VII. Credit for Military Service

Through the Examiner and Recorder of the Chicago Undergraduate Division, the veteran can ascertain to what extent he may meet entrance requirements by credit for service or for courses taken through the United States Armed Forces Institute. Credit in military science, physical education, and hygiene will be granted to any veteran, honorably discharged, who presents evidence that he has completed the basic training program in the Army, Navy, Marine Corps, or Coast Guard. Credit for work taken in college training programs in technical schools, and in courses pursued while the veteran was in service, may be transferred upon the basis of evaluation by the Examiner and Recorder.

Scholarships

Several types of scholarships are available to undergraduate students in the University of Illinois. Some of these are the County Scholarships awarded on the basis of a competitive examination administered each April by the County Superintendent of Schools, the State Military Scholarships, the General Assembly Scholarships, and, in addition, a number of scholarships awarded by the University Scholarship Committee each spring for the following school year. All the scholarships offered, and the individual requirements, are listed in an information folder available upon request from the Office of Admissions and Records at Navy Pier.

Undergraduate scholarships usually cover tuition charges only. Although some are available only to students in a specific course, the majority

may be used in any of the colleges. Students now enrolled may apply for a scholarship for any year; a few scholarships, however, may be awarded only to applicants without college experience. Information regarding scholarships may be obtained from the Office of Admissions and Records, Window E, Room 15, or from the Office of the Dean of Students.

Selective Service Deferment

The Office of Admissions and Records will supply required certificates for students who wish to apply for educational deferments under the regulations of the Selective Service System. Application should be made at Window E, Room 15, at the time the student completes his classification questionnaire. Information concerning educational deferments also is available from this office.

Student Welfare

The University's interest in the individual student extends beyond the classroom to include each student's personal adjustment to college life. To this end, the University provides a broad program of educational, vocational, and personal counseling instruction in healthful living, and extracurricular activities, both social and cultural.

Aid in adjustment to college life begins before the student enrolls at the Chicago Undergraduate Division, with the services of the Student Counseling Bureau available to prospective students seeking help in planning their college careers. New students have an opportunity to meet the deans and directors at a special meeting at the start of each semester.

Counseling facilities of the Student Counseling Bureau, offices of the Dean of Students, the Dean of Men, the Dean of Women, and the Health Service are available to students at all times during their college work at the Chicago Undergraduate Division. Students are also urged to discuss specific educational problems with their instructors. Members of the instructional staff hold weekly office hours for conferences with individual students.

The Student Counseling Bureau helps registered and prospective students to make effective use of their own capacities and the University's resources. It assists students in meeting their individual needs and in coping with a wide variety of problems that occur in the course of college life. Students and prospective students are aided in making decisions about which college or educational program to select in the University, in arriving at suitable vocational choices, and in analyzing and relieving difficulties in studying. Counselors also aid students in removing stumbling-blocks to overall personal growth and success, and in realizing their capacity for fuller and more rapid development.

A. Individual Counseling: Students who feel they have needs or problems, and those who for any reason find they are not fully profiting from college life, are invited to talk over their situation with a professional counselor. Interview schedules are flexible, and students usually can arrange for as much counseling time as they need. Professional aid can help students to improve their own problem-solving ability, to do more effective planning, to lead fuller lives academically and socially, and to derive maximum benefit from their college careers.

B. Test Services: Test of special aptitudes, abilities, vocational and academic interests, and measures of personal-social adjustment, may be taken by individual arrangement with a counselor. These counseling aids are frequently valuable in self-evaluation and in making plans appropriate to one's abilities, aptitudes, and life-situation.

The Counseling Bureau also gives a comprehensive battery of guidance tests to prospective and entering freshman students, and each person may review his test results in a personal interview with a counselor to aid self-evaluation and individual planning. Test scores show relationships between one's own high and low interests and aptitudes, and they also give a basis for comparing oneself with other college students. In addition, many other tests and interest inventories are available to all students at the Chicago Undergraduate Division.

C. Occupational Information Services: In conjunction with the Library Department, the Student Counseling Bureau maintains one of the most comprehensive and up-to-date files of job information available in the State of Illinois. Facts and figures about required qualifications and preparation, pay scales, demand for employees, chances for advance-

ment, and other advantages and disadvantages of thousands of occupations are kept easily accessible to students.

D. Group Counseling: Group counseling sessions are available at a number of times throughout the year, including the summer. This program is intended for students who have found problems in doing their college work, as well as for those who are making good progress but feel a need to increase their personal efficiency in and out of college. Groups are kept small and usually meet twice a week. Group work is geared in with individual counseling where appropriate. Some of the groups deal with a variety of common student problems. Other groups give more specialized attention to such problems as: reading for different purposes, improving powers of concentration, aiding the ability to remember, improving preparation for course examination, taking more usable notes, organizing one's time more efficiently, and learning a variety of methods for studying different courses and course-materials. A personal interview before admission to this program helps one in selecting a group appropriate to individual needs.

E. Location: The Student Counseling Bureau occupies a suite of rooms on the third floor, near the lake end of the Pier. It is near a student lounge on the same floor, and adjacent to the offices of the Student Deans and the Health Service.

Receptionists are in attendance to aid students in making and meeting appointments. Additional information may be obtained at the reception desk, or by calling Ext. 115 at WHitehall 4-3800.

The Speech Clinic

The services of the Speech Clinic are available to those students who want assistance in correcting speech difficulties and to students who desire to increase their effectiveness and fluency in talking to others. Students who stutter, lisp, have foreign accents, hearing deficiencies, or voice problems are aided by the clinic. The clinic also assists students with the problems that sometimes arise in appearing and talking before groups. Students planning theatrical or teaching careers are aided in meeting professional speech requirements.

Dean of Students

The Dean of Students is in charge of most matters of student welfare and extra-curricular activities. The principal assistants in the Office of the

Dean of Students are the Dean of Men, the Dean of Women, and the Assistant to the Dean of Men. These are the general advisers to whom students may go for assistance and advice. The offices of these advisers are open to any student, throughout the day, and inquiries from parents and guardians are welcomed. Details of the services available in the Office of the Dean of Students are given in the following sections.

In addition, the Dean of Students is the administrative officer responsible for all extra-curricular activities and is charged with the co-ordination of the extra-curricular programs of the recognized student clubs and organizations. He is also adviser to foreign students at the Chicago Undergraduate Division.

In connection with the responsibility for student welfare, the Dean of Students is authorized to attend sessions of the Disciplinary Committee, but has no vote.

DEAN OF MEN

The Office of the Dean of Men is organized for the primary purpose of aiding men students. The work of the Dean of Men is in counseling students and advising them on any matters which they wish to bring to him. He is available for individual conferences with students daily. The Dean of Men takes an active part in student extra-curricular affairs through his membership on the Committee on Student Affairs, through his chairmanship of the Administrative Committee on Finance and Audit for Students Organizations, and his duties as secretary of the Student Organizations Fund. He also serves as adviser to Phi Eta Sigma, national scholastic honorary for first-year men students; as Veterans Counselor; and as a vice president for the Parents Association. All official University requisitions for student organizations, events, and affairs are initiated by the Dean of Men, and he serves as financial adviser to student organizations.

The Hospital and Medical Service plan for the students and the voluntary plan for the staff are under the supervision of the Dean of Men. Attendance records for both veteran and non-veteran students are maintained by the Office of the Dean of Men.

DEAN OF WOMEN

The Office of the Dean of Women is the clearing place for the problems of women students. Students are urged to come with questions that inevitably arise—social, personal, academic, or financial.

Abraham Lincoln presides over the popular second floor lounge.

In addition to the friendly, sympathetic counseling of women students, the Dean of Women serves as the adviser to women's organizations at the Chicago Undergraduate Division; as sponsor of Alpha Lambda Delta, national scholastic honorary for freshman women, Activities Honorary Society, and University Dance Committee.

All student social events are co-ordinated and unified through her office in her capacity as chairman of the Administrative Committee on Social Events, Calendar, and Recreation. She offers helpful assistance to student groups in organizing dances, entertainments, special events, and other all-University functions.

ASSISTANT TO THE DEAN OF MEN

The Assistant to the Dean of Men is responsible for handling such duties as may be delegated to him by the Dean of Men, including questions pertaining to the Hospital and Medical Insurance Plan. In addition, he is charged with the responsibility for the development of the music program of the Chicago Undergraduate Division, for co-ordinating and

assisting in all extra-curricular music activities, and for individual conferences with students as required.

LOAN FUNDS

Loan funds have been established for the benefit of worthy students of the University who are in need of financial aid. They are of two general classes: (1) emergency loan funds, and (2) long term or regular loan funds. Most of these funds have special qualifications which must be met by applicants.

Detailed information regarding loan funds and application blanks may be obtained from the Office of the Dean of Men.

STUDENT EMPLOYMENT

For students who find it necessary to earn a portion of their expenses, the Student Employment Division in the Office of the Dean of Men provides information and assistance to needy students desiring part-time jobs, both in University offices and in industry and business in the Chicago area. Applications for part-time jobs should be filed with the Student Employment Manager, Room 313.

The student who expects to be employed will find it to his advantage to arrange his class schedules, at the time of registration, so that consecutive hours are free each day. Employment for the first-year student should be a matter of necessity rather than choice.

HOSPITAL AND MEDICAL SERVICE

A Hospital and Medical Service fee of seven dollars is charged each student at the time of registration to provide limited care in an approved hospital for a basic period of thirty days in any semester. In addition, specific benefits are provided to apply toward the physician's or surgeon's fees during the period of hospitalization, and certain stated benefits are allowed for ambulance expense when needed, for consultant fees, for outpatient treatment, and for miscellaneous hospital expense such as laboratory tests, anesthetic and administration thereof, use of operating room, medicines, drugs, dressings, blood transfusions and administration thereof, and X-rays. A catastrophy clause takes effect after the student has paid

The Health Service is always available for emergencies.

Front lounge is a popular spot.

an additional amount of hospital and doctor bills equal to fifty percent of the basic benefits of the policy. Students are urged to read their certificates carefully to determine the exact benefits that apply to specific situations. The Hospital and Medical Service plan is under the supervision of the Dean of Men. If the student did not receive a certificate at the time of registration, or if there are questions pertaining to this insurance, he should request the Dean of Men, University of Illinois, Navy Pier, Chicago 11, Illinois, to supply the necessary information.

The dependents of students may be covered under this same insurance plan by the payment of an additional fee. In order to enroll dependents, application must be made and the necessary fee for such coverage paid to the University cashier within three weeks of the effective date of the insurance of the student member.

Note: A student who presents evidence of participation in any other group insurance system providing equal or greater benefits than those governed by the University fee may petition, through the Office of the Dean of Men during the first ten days of registration, for a refund of this fee.

Extra-curricular Activities

Student extra-curricular activities are recognized as an important part of the student's life and are encouraged in part as an adjunct to curricular courses; to develop individual talents in speech, music, drama, journalism, radio production, etc.; and to develop qualities of leadership, personality, and character. Many student clubs and organizations are active on the campus. These groups sponsor varied social and cultural activities for the benefit of the entire student body. All questions pertaining to extra-curricular activities should be directed to the Dean of Students, Room 313.

The Committee on Student Affairs is an official body appointed to assist the Dean of Students in the development and supervision of student extracurricular and student government activities.

The Student government organization, the Student Congress, is composed of four officers and twenty representatives. The officers and ten of the representatives are elected by a vote of the entire student body at a general election each year, but the other ten representatives are elected by students organizations to provide one representative for each of ten groups of recognized student activities. Officers of the Congress serve on the Committee on Student Affairs.

Joint student-faculty administrative committees assist in the supervision of student organization. These committees, in each case, are composed of a faculty representative of the Committee on Student Affairs and two members of the Student Congress. The administrative committees review all matters referred to them, and make recommendations to the Committee on Student Affairs and the Student Congress for appropriate action.

Students are provided an opportunity for experience in journalism through the weekly student newspaper, the *Pier Illini*, written and edited entirely by students. Engineering students edit the Chicago Undergraduate Division section of the *Illinois Technograph*, the University of Illinois engineering periodical.

Supplementing classroom work, three language clubs, The Future Teachers of America, the Pershing Rifles, the Commerce Club, the Veterans-Illini Club, the International Relations Club, The Humanities Club, and the Cadet Association provide cultural programs for the students. En-

Orchesis rehearses modern dance routines.

gineering, architecture, chemistry, pre-law, and pre-medical students may take part in the activities of their respective professional societies, several of which are affiliated with national professional organizations.

Students interested in music and drama may seek membership in the University Band, the University Choir, the Music Appreciation Club, or the Pier Playhouse. Extra-curricular organizations in athletics and physical education include the Varsity Lettermen's Club, Orchesis, the modern dance organization, the Co-Recreational Association, and the Women's Athletic Association.

All-University dances are sponsored by the University dance committee. Other varied student interests include a chess club, a photography club, an amateur radio club, and an activities honorary society.

Honorary scholastic societies include Alpha Lambda Delta for freshman women and Phi Eta Sigma for freshman men.

Debating

The forensics program at the Chicago Undergraduate Division provides an opportunity for students to gain experience in debating, discussion, and individual events. All students, including those without previous experience, may take part in the forensic activities.

The debating program begins each fall with an instructional program for newcomers and an intramural tournament. From mid-November to mid-April a full schedule of intercollegiate competition is maintained. In addition to Chicago-area colleges and universities which come to the Chicago Undergraduate Division for debates, guest teams from outside

Baseball huddle.

the city have included colleges and universities from Florida, Texas, Iowa, Michigan, Missouri, Ohio, and New York. Speakers from the Chicago Undergraduate Division also attend tournaments in Illinois and nearby states, where they meet debaters from schools throughout the country.

Since its organization in 1947, the debate team has engaged in both junior and senior college competition. It has won the Chicago Area, the state, and the regional championships, and in 1952, 1953, and 1954 represented the East Central States area in the national championship tournament at West Point, New York.

Problems of national and international interest are the topics for public discussion and panel presentations, both on and off campus. These programs, usually followed by audience participation, are sometimes joint presentations with other colleges and universities. Chicago Undergraduate Division speakers are often featured on adult forum programs.

Debating and the forum discussions are under the supervision of the Forensic Council, a faculty committee appointed by the Dean of the Chicago Undergraduate Division. Members of the faculty of the speech department work directly with student participants.

The Chicato Undergraduate Division participates in eleven varsity sports—football, basketball, baseball, cross-country, track, wrestling, swimming, soccer, gymnastics, tennis, and golf. In accordance with a special ruling, freshmen in good standing are allowed to participate in varsity sports.

A special feature is the extensive intramural program in which students can elect to take part in wrestling, badminton, table-tennis, volleyball, basketball, gymnastics, handball, weight lifting, tennis, track, and softball. The intramural and intercollegiate programs are under the supervision of an athletic sub-committee of student and faculty representatives. Both programs are financed through funds from student activities fees.

The Chicago Undergraduate Division Gymnasium, adjacent to the west end of Navy Pier, is the center of the intramural and physical education programs. Basketball games, wrestling meets, and gymnastics meets are also held in the gymnasium which has floor space for eight full-size basketball courts.

A staff of sixteen coaches directs the Chicago Undergraduate Division athletic activities. Varsity letter awards are made to athletes who meet the participation requirements of intercollegiate competition, to sophomore managers, and to sophomore cheerleaders.

Pier Playhouse presents a costume drama.

Locating some of the library's 70,000 volumes through the card catalog.

University Services

University Library

The library of the Chicago Undergraduate Division is among the best of the newer college libraries. Although only nine years old, it contains more than 70,000 volunes, which have been carefully chosen with undergraduate curricula in mind, as well as general and recreational interests of students and faculty. Orders for new books are being placed constantly.

While no attempt is made to duplicate scholarly research facilities already available in the city, emphasis is placed on general reference, library instruction, and readers' advisory service, with liaison maintained with the teaching program and student activities.

An excellent collection of general and special encyclopedias, atlases, bibliographies, dictionaries, handbooks, year books, and directories (6,000 volumes) has been assembled. A complete card catalog is provided and thirty periodical indexing services are available. The subscription list includes nearly 600 magazines and journals. Twenty-year back files of 300 particularly useful periodicals have already been bound for per-

manent reference use and are available on open shelves. An extensive vertical-file pamphlet collection, excellent microfilm reading facilities, vocational guidance materials, and college catalogs are also provided.

The Library has three service areas. The open-shelf Main Reading Room is located on the second floor at the east end of the Pier. It offers liberal reference and circulation facilities, in addition to well-lighted study space for 700 students. The Reserve Book Station, located near the bus line, makes assigned reading materials conveniently available. The Fine Arts Reading Room (Room 246) offers special facilities in architecture and art. The Library staff of twenty-six includes twelve trained librarians, and fourteen full-time clerks. Library hours are 8:30 a.m. to 5 p.m., Monday through Friday.

University Bookstore

The University Bookstore is operated by the University to provide faculty approved texts and supplies as required by the various courses at the Chicago Undergraduate Division.

The Bookstore is located at Room 87. It is open daily, Monday through Friday, from 8:30 a.m. to 4:30 p.m. During the registration period, the Bookstore is open from 8:30 a.m. to 6 p.m.

Food Service

The University operates non-profit food service facilities for the convenience of students, faculty, and staff. The student cafeteria serves well-balanced, low-cost lunches and breakfasts. The cafeteria is located at the east end of the Pier. A soda fountain, serving sandwiches and beverages, is operated in connection with the cafeteria.

A popular student spot between classes is the snack bar located at the entrance to the Pier, adjacent to the reception lounge. In addition, a dining room at the east end of the Pier offers cafeteria-style service to members of the faculty and staff.

Health Service

The University maintains a Student Health Service to promote better physical and mental health among the students at the Chicago Undergraduate Division. Physical examinations, given by the staff of the University Health Service, are required of all students prior to the time

The Snack Bar is a gathering place for students and faculty between classes.

of their first registration and each year thereafter. Chest X-rays are required as part of the physical examination. Immunizing inoculations for smallpox, tetanus, diphtheria, influenza, and typhoid fever are available to students without charge.

The staff of five physicians instruct classes in hygiene and sanitation. As the functions of the Health Service are primarily educational and preventive, its staff does not assume responsibility for the care of students beyond giving medical advice, emergency treatment, and vaccinations. It is emphasized that advice to students contemplates a real concern for the best treatment whenever indicated and that the discussion of student welfare problems with the staff of the Student Health Service is encouraged. Members of the staff are available at all times for conferences with the students about individual health problems. The Health Service is located on the third floor at the east end of the Pier. The office is open from 8 a.m. to 5 p.m. daily and during vacation periods.

Courses Required of All Students

The following course requirements must be met by all students registered at the Chicago Undergraduate Division. These subjects are to be started

Classes are kept small for maximum individual attention.

in the first semester of the freshman year, except as otherwise provided, and are to be continued until these requirements are completed.

1. Men and women entering the University with less than sixty semester hours of credit are required to secure four semesters of credit in physical education including the amount transferred. Those entering with sixty semester hours or more are exempt from the requirement in physical education.

2. Hygiene is required of all students entering the University of Illinois with less than thirty semester hours of credit irrespective of the college in which they enter unless they have previously had equivalent credit in this course. Students entering with thirty semester hours or more are exempt from this requirement.

3. Two semesters of rhetoric (Rhetoric 101 and 102) are required. All students entering the University as freshmen direct from secondary schools are required to take a placement test in rhetoric. A satisfactory proficiency in the use of written English is a requirement for all undergraduate degrees. Students who receive grades of "C" or "D" in Rhetoric 102, or its equivalent, are required to take an English qualifying examination before graduating. Those who fail to pass the qualifying examina-

tion are required to pass an extra semester course in rhetoric (Rhetoric 200).

The Grading System

The following grades are given in the University of Illinois: A — Excellent, B — Good, C — Fair, D — Poor (lowest passing grade), E — Failure.

The University does not use plus or minus signs with the letter grades. Further, there are no numerical equivalents.

A student with a failure may have a special examination on the recommendation of the head of the department approved by the dean of his college, and on payment of a fee of $5, or he may take courses in sequence, with the approval of the department.

Other symbols in use are:

W — Withdrawn from the course without penalty.

Ex — Absent from the final examination for reasons acceptable to the dean of the college concerned and hence "Excused." (Entitles the student to an examination later without fee, but becomes a failure if not removed during the first semester that the student completes in residence following the giving of the grade of "Ex.")

Rep — Replaces grade of "Ex" when course in which "Ex" grade was received is repeated by the student. A student may earn credit in a course in which he received an "Ab" grade by taking a special examination (fee $5) during the next semester in which he is in residence, but not to be taken within ten days of the final examination period.

Inc — The grade of "Incomplete" is no longer authorized except in the required work in physical education. Except in this department instructors are required to assign a definite grade representing both the quality and the quantity of the work accomplished.

Grade-Point Average

In computing the grade-point average, weighted values are given to the grades as follows: A = 5 grade points; B = 4; C = 3; D = 2; E = 1; Ab = 1. To compute the grade-point average, multiply the number of

hours of each grade by the weight, add the products, and divide by the number of hours. Thus, if you earn three hours of A, six of B, three of C, two of D, and four of E, the computation of your grade-point average is as follows:

Grade	*Hours*	*Weight*	*Grade Points*	
A	3	5	15	
B	6	4	24	
C	3	3	9	
D	2	2	4	
E	4	1	4	56
	—		—	$\frac{56}{18} = 3.111$
	18		56	18

Your grade-point average is 3.111.

College of Commerce and Business Administration

Through knowledge of modern business practices and the fundamental principles on which economic systems operate, the College of Commerce and Business Administration seeks to develop in students the intellectual powers necessary for administrative careers. For this purpose it offers a unified program of basic studies for freshmen and sophomores. Though the factual contents of many of the courses are directly useful in specific vocations, students should expect to serve an apprenticeship in the fields they enter after graduation from this college if they wish to prepare themselves for higher positions.

While concentrating in a special field, students are encouraged to elect courses offered in other colleges of the University and to secure as liberal an education as possible to avoid the narrowing effects of early specialization.

The courses required and available in the first two years in this college are primarily organized to serve as a foundation for building the study in a field of concentration in the junior and senior years.

Students who have completed this two-year program with a satisfactory scholastic record are qualified for admission to the Upper Division of the College of Commerce and Business Administration or for admission to the College of Eduation, the College of Law, or the School of Journalism and Communications. Students transferring to other colleges after

completing only the two-year program of the College of Commerce receive their degrees not from the College of Commerce and Business Administration, but from the college to which they transfer on completing the requirements of that college.

Another group of students has not been forgotten. This group comprises those who will not be able to attend school for more than one or two years. The program is so arranged that the maximum benefit of basic business knowledge can be obtained in that more limited period.

Summary of Requirements for Graduation

A candidate for the degree of Bachelor of Science in a field of the College of Commerce and Business Administration must:

1. Fulfill general University requirements as to registration, residence, scholarship, and fees.

Commerce students work with business machines.

2. Have a total of 130 credit hours of which not less than sixty credit hours must be in Accountancy, Business Law, Economics, Management, and Marketing. Secretarial Training courses may be included in the fields of Commercial Training and Secretarial Training. In Commercial Teaching and Commerce and Law only forty-five such hours are required, while in Industrial Administration the number of such hours is fifty.

3. Complete courses included in University requirements, College General Education requirements, and College General Business requirements. (See pages 42 and 43).

4. Complete the requirements for one of the fields of concentration. (See page 43.)

5. Have a minimum average of 3.0 for all courses counted toward graduation.

Electives

Whenever a program for any session includes all possible required courses at that time, and it seems desirable to add other courses to make a reasonable number of hours, certain electives are recommended. Prerequisites for these electives should be observed carefully. These electives should be directed toward requirements in the Upper Division. They include management, marketing, anthropology, history, philosophy, political science, psychology, and sociology, as well as additional courses in mathematics, science, English, or foreign language. Any advice desired on these electives may be obtained at the office of the dean or from the adviser at the time of registration.

Commerce and Law

Students interested in obtaining a legal education may take their pre-legal work in the College of Commerce and Business Administration. This preparation should be of particular interest to students looking forward to some phase of the legal practice involving business or corporation law. The general requirements are the same as those for all Commerce students shown on page 42. The third year includes requirements of special value to the pre-law student. The courses involved here include commerce courses as well as those in political science, history, and philosophy.

When a student has completed 100 hours in the College of Commerce and Business Administration and thirty hours in the College of Law, including all required courses and all other graduation requirements, he will be granted the degree of Bachelor of Science in Commerce and Law. Upon completion of the requirements of the two remaining years in the College of Law, the law degree will be granted.

Commercial Teaching

Since there are certain state requirements for certification of teachers in Illinois high schools, a special program to meet these requirements for commercial teachers has been established in the College of Commerce and Business Administration. The approved program for this field for the first two years is shown on page 44.

Prejournalism

Students desiring to enter the School of Journalism and Communications may do so after the completion of two years with proper grade average in the College of Commerce and Business Administration. Those interested in advertising and other business phases of journalism may find consideration of this program profitable. The general program for this purpose is the same as that shown below.

Requirements for All Commerce Students

(Except Commercial Teaching)

I. University Requirements. *All available at the Chicago Undergraduate Division.*	CREDIT HOURS	NORMAL SEMESTER
Hygiene	2	2
Military[1]	4	1, 2, 3, 4
Physical Education	4	1, 2, 3, 4
Rhetoric 100[2], 101, 102	6	1, 2, (3)
Total	16	
II. College General Education Requirements. *All available at the Chicago Undergraduate Division*		
Economics 136—Economic History of the United States, or Economics 138—Introduction to the Economic History of Modern Europe, or Geography 105—Introductory Economic Geography	3[3]	1
Economics 100—Introduction to Business *(strongly recommended)*	(3)[3]	2
Literature or Language[4]	6	1, 2, 3 or 4
Mathematics 103—Introduction to College Algebra and Mathematics 112—College Algebra[5]	0 to 6	1, 2
Rhetoric 151—Business Letter Writing	3	3 or 4
Science or Advanced Mathematics[6]	4	1 or 2
Secondary List (Anthropology, History, Philosophy, Political Science, Psychology, or Sociology)	6	3 or 4
Speech 101—Principles of Effective Speaking	3	1, 2, 3 or 4
Additional hours in Language, Literature, Advanced Mathematics, Science, or the Secondary List to bring the total of this group, excluding Economics 100, to 39 credit hours	0 to 17	
Total	39	

III. College General Business Education Requirements. *All except those shown with an asterisk are available at the Chicago Undergraduate Division.*

Accountancy 101 or 102—Principles of Accounting	3 or 2	1
Accountancy 105—Accounting Procedure	3	2
Accountancy 106—Elementary Cost Accounting *(recommended)*, or Accountancy 108—Intermediate Accounting	3	3
Business Law 100—Basic Principles of Business Law	3	4
Economics 102, 103—Principles of Economics	6	3, 4
Economics 170—Elements of Statistics	3	4
Economics 250—Money, Credit, and Banking*	3	
Economics 254—Business Finance*	3	
Management 101—Industrial Organization and Management	3	4
Marketing 101—Principles of Marketing	3	4
Economics—electives*	6	
Total	39 or 38	

IV. Field of Concentration Requirements and Free Electives.

Sufficient credit hours must be taken here to make a grand total of 130 credit hours. *None of the required courses in the fields of concentration are available at the Chicago Undergraduate Division.*

Fields of Concentration:

- Accountancy
- Commerce and Law
- Commercial Teaching (special program)
- Economics of Government and Business, Public Utilities, and Transportation
- Economic Theory
- Finance
- General Economics (eight sub-fields)
- Industrial Administration
- Insurance (two sub-fields)
- Labor Economics
- Management
- Marketing (nine sub-fields)
- Personnel Management (three sub-fields)
- Secretarial Training
- Statistical Economics (six sub-fields)

Further information about any of these fields of concentration or any other academic questions arising in connection with any of the above material should be directed to the Associate Dean in charge of the College of Commerce and Business Administration, Room 27.

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[1] Not required if first sixty credit hours are taken at the Chicago Undergraduate Division.

[2] Not required unless placement examination so indicates.

[3] For freshmen only. Students with thirty credit hours or more should not take this course.

[4] If literature is elected, six hours of American or English literature will satisfy the mininum requirement. If language is elected, it must be a modern foreign language and the equivalent of four semesters when pursued in college must be taken to satisfy requirements.

[5] A student should always be guided by his placement examination but, in general, one who has one year of high school algebra must take Mathematics 103 followed by Mathematics 112; one who has one and one-half years of high school algebra must take Mathematics 112; and one who has two years of high school algebra need not take any college algebra unless he wishes.

[6] If science is elected it may be any laboratory science (geography is not included here). If mathematics is elected it may be any course in advance of college algebra, trigonometry included.

Curriculum Preparatory to Teaching Commercial Subjects

FIRST YEAR FIRST SEMESTER	17 HOURS
Accy. 101—Principles of Accounting	3
Biology 101—Fundamentals of Biology	4
Econ. 136—American Economic History, or Econ. 138—European Economic History	3
Math. 112—College Algebra[1]	3
Rhet. 101—Rhetoric and Composition	3
Physical Education	1

SECOND SEMESTER	18 HOURS
Accy. 105—Accounting Procedure	3
Biology (choice)	4
Econ. 100—Introduction to Business	3
Ed. 101—The Nature of the Teaching Profession	2
Hygiene 101—Personal and Environmental Hygiene, or Hygiene 104—Personal and Community Health	2
Rhet. 102—Rhetoric and Composition	3
Physical Education	1

SECOND YEAR FIRST SEMESTER	16 HOURS
Accy. 106—Elementary Cost Accounting	3
Econ. 102—Principles of Economics	3
Geog. 105—Introduction to Economic Geography	3
Sociol. 100—Principles of Sociology	3
Speech 101—Principles of Effective Speaking	3
Physical Education	1

SECOND SEMESTER	17 HOURS
Econ. 103—Principles of Economics	3
Hist. 152—History of the United States	3
Mktg. 101—Principles of Marketing	3
Psych. 100—Introduction to Psychology	4
Elective[2]	3
Physical Education	1

College of Engineering

To prepare men for professional work in engineering and architecture and for responsible positions of a technical character in industry, commerce, and government, the College of Engineering at the Chicago Undergraduate Division provides training in the mathematical and engineering sciences and their applications to the design, construction, and operation of industrial plants, buildings and homes, and public and private works of all kinds.

The curricula in this college, though widely varied and specialized, are built on a general foundation of scientific facts and theories applicable to many different fields. Work in the classrooms, laboratories, shops, and drafting rooms is correlated by practical problems similar to those of practicing architects and engineers. The curricula in architecture in the College of Engineering are offered under the Department of Architecture and Art. A discussion of the curricula in architecture is presented following the curricula in engineering.

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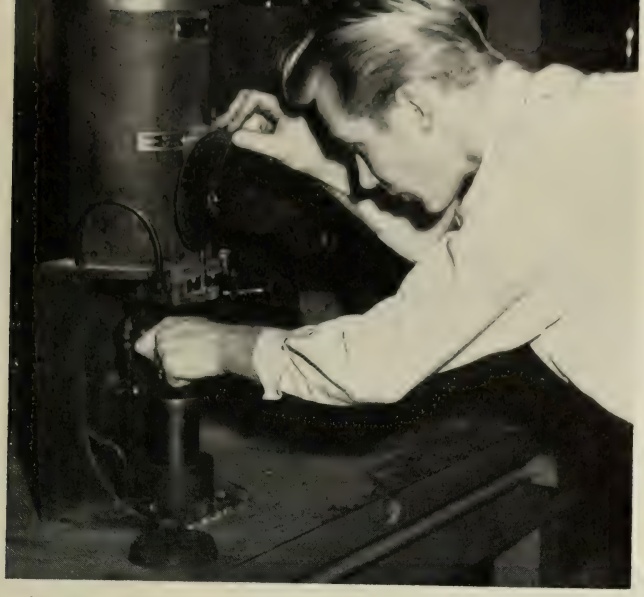
[1] May require adjustment if entrance credit includes only one unit of high school algebra.

[2] This could include Business Law 100, Political Science 150, or Rhetoric 151 as specific requirements; Accountancy 108, American or English Literature, or Philosophy 105 as option electives; Marketing 101 as a free elective. Whichever ones are chosen would affect the junior or senior program in that respect.



Mechanical engineers test sand in the metals casting laboratory.

In addition to the fundamental and technological courses in each curriculum, cultural courses are required, such as history, economics, and rhetoric, and others are elective, so that each student may broaden his program. While each student pursues a curriculum of his own choice according to the field of his particular interest, certain courses are required. Basic courses in mathematics, chemistry, physics, rhetoric, and general engineering are required in the first two years.

At the Chicago Undergraduate Division the first two years are offered in the fields of aeronautical engineering, ceramic engineering, civil engineering, electrical engineering, engineering physics, general engineering, industrial engineering, mechanical engineering, metallurgical engineering, and mining engineering. Those few required courses which are not available here are properly noted.

Instruction is designed primarily to prepare the student to enter the College of Engineering on the Urbana campus of the University of Illinois in his third year to complete the courses leading to the degree.

Summary of Requirements for Graduation

Students in the College of Engineering who meet the University's general requirements with respect to registration, residence, and fees, and who maintain satisfactory scholastic records in this college, are awarded degrees appropriate to their curricula. Each curriculum requires a min-

imum of 136 semester hours of credit, not counting the required work in military science and physical education.

Each curriculum leads to the degree of Bachelor of Science and may ordinarily be completed in four years. A graduate of one curriculum ordinarily can qualify for another baccalaureate degree by doing a fifth year of work consisting of thirty to thirty-six semester hours, acceptable to the faculty of this college, providing plans have been made toward such an arrangement at the beginning of his third year.

A graduate of the College of Liberal Arts and Sciences, or any other college of equal standing, who has adequate training in mathematics, physics, and mechanics to enable him to begin the third year of a curriculum in the College of Engineering, can usually qualify for the degree of Bachelor of Science from this college by two and one-half years of work.

Nontechnical electives include all courses in the College of Liberal Arts and Sciences except those in mathematics, chemistry, and chemical engineering; all courses in the College of Commerce and Business Administration; Architecture 113, 217, and 218; Art 111, 112, and 115; Education 300 through 304; General Engineering 140, 141, 216, 220, and 292; Industrial Engineering 230 and 239; Journalism 215, 216, and 218; Landscape Architecture 164 and 174; and Music 100 through 131. The student may petition to receive credit for other courses which conform to the objectives of what are known as the social-humanistic studies. It is expected that the student will consult with his departmental adviser when selecting his nontechnical electives.

Transfer students may substitute survey courses of nontechnical areas for their nontechnical electives, although circumstances may dictate some reduction in credit.

Departmental electives and technical options are restricted to courses of a technical character as listed under this classification by each department. Options are groups of related courses in a special field of subject matter.

Most of the curricula in the College of Engineering provide an opportunity for concentration of the student's effort in the senior year along lines of his particular interest, within the broad field of his chosen curriculum. This is accomplished by curriculum options, which are groups of subject-matter related to recognized fields of concentration in professional engineering practice.

Common Program for Freshmen

FIRST YEAR FIRST SEMESTER	17 OR 18 HOURS
Chem. 102 or 103—General Chemistry	3 or 4
G.E.100—Engineering Lectures	0
G.E. 101—Elements of Drawing	3
Hygiene 101—Personal and Environmental Hygene	2
Math. 123—Analytic Geometry	5
Rhet. 101—Rhetoric and Composition	3
Physical Education	1

SECOND SEMESTER	18 HOURS
Chem. 104—Chemistry of Metallic Elements	4
G.E. 102—Descriptive Geometry	3
Math. 133—Calculus	3
Physics 106—Mechanics	4
Rhet. 102—Rhetoric and Composition	3
Physical Education	1

Curriculum in Aeronautical Engineering

FIRST YEAR

Common Program for Freshmen (above).

SECOND YEAR FIRST SEMESTER	16 OR 17 HOURS
Math. 143—Calculus	5
M.E. 182—Manufacturing Processes	3
Physics 107—Electricity and Magnetism, Modern Physics	4
Modern History or Political Science	3 or 4
Physical Education	1

SECOND SEMESTER	16 OR 17 HOURS
Met. E. 160 (New Course)[1]	3
Physics 108—Heat, Sound, Light	4
T.A.M. 156—Analytical Mechanics (Statics and Dynamics)	5
Modern History or Political Science	3 or 4
Physical Education	1

Curriculum in Ceramic Engineering

FIRST YEAR

Common Program for Freshman (above).

SECOND YEAR FIRST SEMESTER	18 HOURS
Cer. E. 101—Introduction to Ceramic Engineering[2]	3
Chem. 123—Quantitative Analysis[3]	5
Math. 143—Calculus	5
Physics 107—Electricity and Magnetism, Modern Physics	4
Physical Education	1

SECOND SEMESTER	18 HOURS
Cer. E. 102—Ceramic Processes and Equipment[2]	3
Geol. 130—Mineralogy for Engineers[2]	3
Physics 108—Heat, Sound, Light	4
T.A.M. 154—Analytical Mechanics (Statics and Dynamics)	4
Technical or Nontechnical Electives	3
Physical Education	1

Curriculum in Chemical Engineering

This curriculum is administered by the College of Liberal Arts and Sciences. See pages 59 to 60.

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[2] Not offered at Chicago Undergraduate Division 1955.

[1] Not offered at Chicago Undergraduate Division; must be taken at Urbana.

[3] Not offered at Chicago Undergraduate Division; substitute Chemistry 122, Elementary Quantitative Analysis.

Curriculum in Civil Engineering

FIRST YEAR

Common Program for Freshmen (page 47).

SECOND YEAR — FIRST SEMESTER	17 HOURS
C.E. 105—Plane Surveying	2
C.E. 160—Building Construction	3
G.E. 111—Advance Drafting for Civil Engineers	2
Math. 143—Calculus	5
Physics 107—Electricity and Magnetism, Modern Physics	4
Physical Education	1

SECOND SEMESTER	16 HOURS
C.E. 106—Surveying[1]	3
Geol. 150—Engineering Geology	3
Physics 108—Heat, Sound, Light	4
T.A.M. 150—Analytical Mechanics (Statics)	2
Nontechnical Electives	3
Physical Education	1

SUMMER

C.E. 207—Summer Surveying Camp 5

Curriculum in Electrical Engineering

FIRST YEAR

Common Program for Freshmen (page 47).

SECOND YEAR — FIRST SEMESTER	16 HOURS
Econ. 108—Elements of Economics	3
Math. 143—Calculus	5
Physics 107—Electricity and Magnetism, Modern Physics	4
Speech 101—Principles of Effective Speaking	3
Physical Education	1

SECOND SEMESTER	16 HOURS
Econ. 248—Personnel Administration	3
E.E. 126—Electric Circuits and Fields	4
Physics 108—Heat, Sound, Light	4
T.A.M. 154—Analytical Mechanics (Statics and Dynamics)	4
Physical Education	1

[1] Offered for first time February, 1955.

Physics research experiments.

Curriculum in Engineering Physics

The purpose of this curriculum is to prepare students for investigations in engineering problems calling for a knowledge of physics and mathematics or chemistry, and for positions in certain industries which prefer men with a thorough education in basic science.

Students in the engineering physics curriculum, when registering for advanced undergraduate courses in physics at any stage in that curriculum, must have a grade average of at least 3.5 in all subjects, exclusive of the basic courses in military training and physical education, and a combined grade average of at least 3.5 in all courses in mathematics and physics taken prior to such registration. Transfer students must have a corresponding record in the insitution from which they transfer, and must maintain such status at the University of Illinois.

FIRST YEAR

Common Program for Freshmen (page 47).

SECOND YEAR FIRST SEMESTER	17 HOURS	SECOND SEMESTER	16 HOURS
German or Nontechnical Electives[1]	4	German or Nontechnical Electives[1]	4
Math. 143—Calculus	5	Math. 343—Advanced Calculus[2]	3
Physics 107—Electricity and Magnetism, Modern Physics	4	Physics 108—Heat, Sound, Light	4
Nontechnical Electives[1]	3	Physics 341—Electricity and Magnetism	4
Physical Education	1	Physical Education	1

Curriculum in General Engineering

This curriculum provides a fundamental engineering training with moderate emphasis on design and a fixed requirement of fifteen hours in economics, corporation finance, engineering law, and labor problems. Specialization in any field of the student's choice is permitted in the liberal provisions for elective studies, as well as an option by means of which he may elect either structural or machine design. The curriculum is intended for students who do not wish to pursue the more specialized engineering curricula, but who wish to ally themselves with industrial and commercial development in the fields of management, operation, and construction — preparation for which is founded on scientific and engineering facts and disciplines, supplemented by economic and social orientations. A sales engineering option can be readily planned within the elective framework of the curriculum.

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[1] It is suggested that the nontechnical electives be chosen from the social sciences (i.e., anthropology, history, political science, psychology, and sociology) or the humanities (i.e., art, classics, English, humanities, music, and philosophy).

[2] Mathematics 341 may be substituted for Mathematics 343.

FIRST YEAR

Common Program for Freshmen (page 47).

SECOND YEAR — FIRST SEMESTER	16 HOURS
Econ. 108—Elements of Economics	3
Math. 143—Calculus	5
M.E. 183—Materials Casting, or C.E. 115—General Surveying	3
Physics 107—Electricity and Magnetism, Modern Physics	4
Physical Education	1

SECOND SEMESTER	18 HOURS
C. E. 115—General Surveying, or M.E. 183—Materials Casting	3
M.E. 184—Metal Processing	3
Physics 108—Heat, Sound, Light	4
Speech 101—Principles of Effective Speaking	3
T.A.M. 150—Analytical Mechanics (Statics)	2
Nontechnical Electives	2
Physical Education	1

Curriculum in Industrial Engineering

FIRST YEAR

Common Program for Freshmen (page 47).

SECOND YEAR — FIRST SEMESTER	18 HOURS
Econ. 108—Elements of Economics	3
Math. 143—Calculus	5
M.E. 183—Materials Casting, or M.E. 184—Metal Processing	3
Physics 107—Electricity and Magnetism, Modern Physics	4
T.A.M. 150—Analytical Mechanics (Statics)	2
Physical Education	1

SECOND SEMESTER	18 HOURS
G.E. 112—Advanced Drafting for Mechanical Engineers[1]	2
M.E. 184—Metal Processing, or M.E. 183—Materials Casting	3
Physics 108—Heat, Sound, Light	4
T.A.M. 211—Analytical Mechanics (Dynamics)	3
T.A.M. 221—Resistance of Materials	3
Nontechnical Electives	2
Physical Education	1

Curriculum in Mechanical Engineering

FIRST YEAR

Common Program for Freshmen (page 47).

SECOND YEAR — FIRST SEMESTER	18 HOURS
Econ. 108—Elements of Economics	3
Math. 143—Calculus	5
M.E. 183—Materials Casting, or M.E. 184—Metal Processing	3
Physics 107—Electricity and Magnetism, Modern Physics	4
T.A.M. 150—Analytical Mechanics (Statics)	2
Physical Education	1

SECOND SEMESTER	18 HOURS
G.E. 112—Advanced Drafting for Mechanical Engineers[1]	2
M.E. 184—Metal Processing, or M.E. 183—Materials Casting	3
Physics 108—Heat, Sound, Light	4
T.A.M. 211—Analytical Mechanics (Dynamics)	3
T.A.M. 221—Resistance of Materials	3
Nontechnical Electives	2
Physical Education	1

Curriculum in Metallurgical Engineering

FIRST YEAR

Common Program for Freshmen (page 47).

SECOND YEAR — FIRST SEMESTER	18 HOURS
Chem. 123—Quantitative Analysis	5
Math. 143—Calculus	5
Phsyics 107—Electricity and Magnetism, Modern Physics	4
Nontechnical Electives	3
Physical Education	1

SECOND SEMESTER	15 HOURS
Met. E. 150—Introduction to Metallurgy[2]	3
Physics 108—Heat, Sound, Light	4
T.A.M. 154—Analytical Mechanics (Statics and Dynamics)	4
Nontechnical Electives	3
Physical Education	1

[1] Offered for first time February, 1955.

[2] Not offered at Chicago Undergraduate Division 1955.

Curriculum in Mining Engineering

FIRST YEAR

Common Program for Freshman (page 47).

SECOND YEAR FIRST SEMESTER	18 HOURS
Min. E. 151—Elements of Mining[1]	2
C.E. 115—General Surveying	3
Math. 143—Calculus	5
Geol. 150—Geology for Engineers	3
Physics 107—Electricity and Magnetism, Modern Physics	4
Physical Education	1

SECOND SEMESTER	18 HOURS
Min. E. 152—Fuels[1]	3
Min. E. 154—Mine Surveying[1]	2
Econ. 108—Elements of Economics	3
Geol. 130—Mineralogy for Engineers[1]	3
Physics 108—Heat, Sound, Light	4
T.A.M. 150—Analytical Mechanics (Statics)	2
Physical Education	1

SUMMER FIRST AND SECOND WEEKS

Min. E.205—Summer Mine Surveying[1] 2

Architecture and Art

Offered under the College of Engineering.

The curriculum in architecture is a five-year course and is offered with two optional programs. For both options, the work for the first year is identical. A field of specialization is selected in the second year.

The general option places the major emphasis on architectural design and includes a substantial program in architectural construction. While the esthetic is emphasized, basic preparation in liberal and scientific fields is required. The aim is to train the student for efficient service as a draftsman or designer in an architectural organization and to provide him with the necessary foundation for future independent practice.

The construction option (architectural engineering) offers a major study in building design, a thorough training in all forms of building construction, and emphasizes the structural and mechanical aspects of architecture. As the curriculum includes three and one-half years of architectural design, freehand drawing, and the history of architecture, the student who is primarily interested in construction can acquire a considerable knowledge of the artistic and utilitarian phases of planning. This option affords a relatively wide range of elective courses in the social sciences, business, engineering, language, and literature. It also provides sufficient training for independent practice as an architectural engineer.

[1] Not offered at Chicago Undergraduate Division.

In either option, the graduate who has acquired the necessary experience can apply for examination for State Professional Registration.

Excellent facilities in lecture, drafting rooms, and studios are provided by the Department of Architecture and Art. The departmental Fine Arts Reading Room affords an outstanding collection of 6,000 volumes, 7,000 slides, innumerable pamphlets, clippings, and graphic material.

Since the Undergraduate Division is located in Chicago, the department has numerous opportunities to present outstanding architects and professional lecturers as well as inspection trips to museums, galleries, and various types of buildings under construction.

The practice couses in art are primarily for students in the architectural curriculum. Courses in the history and appreciation of art, drawing, and sculpture are provided for students registered in other colleges of the University.

Chicago's skyline inspires student artists.

Architects at work.

Electives

Electives provided in the two architectural curricula may consist of any courses given in the University and not required in the curricula, not paralleling the subject matter of required courses, and not open to freshmen. The following, which are open to freshmen, are also acceptable as electives: History 111, 112, 131; Botany 100, 101; Geography 101, 104, 105; Geology 101; Biology 101; Speech 101, 141; English 111, 112; Accountancy 101. Courses with prerequisite of sophomore standing which are acceptable as electives include Rhetoric 152; Economics 108; English 131; Political Science 150, 151; Sociology 100.

Curriculum in Architecture (Five Years)

FIRST YEAR — FIRST SEMESTER	15 HOURS
Art 181—Freehand Drawing	2
G.E. 107—Architectural Projections	2
Hygiene 101—Personal and Environmental Hygiene, or Hygiene 104—Personal and Community Health	2
Math. 117—Combined Freshman Mathematics	5
Rhet. 101—Rhetoric and Composition	3
Physical Education	1

SECOND SEMESTER	15 HOURS
Arch. 101—Introduction to Architecture	3
Art 182—Freehand Drawing	2
G.E. 108—Architectural Projections	2
Math. 127—Combined Freshman Mathematics	4
Rhet. 102—Rhetoric and Composition	3
Physical Education	1

SECOND YEAR FIRST SEMESTER	16 HOURS
Arch. 131—Architectural Design	3
Arch. 141—Materials and Methods of Construction I	2
Art 183—Freehand Drawing	2
Physics 101—General Physics	5
Elective	3
Physical Education	1

SECOND SEMESTER	16 HOURS
Arch. 113—History of Ancient Architecture	2
Arch. 132—Architectural Design	3
Arch. 142—Materials and Methods of Construction II	2
Art 184—Freehand Drawing	2
T.A.M. 171—Elementary Mechanics	3
Elective	3
Physical Education	1

Curriculum in Architectural Engineering (Five Years)

FIRST YEAR

Common Program for Freshmen (page 53).

SECOND YEAR FIRST SEMESTER	16 HOURS
Arch. 131—Architectural Design	3
Arch. 141—Materials and Methods of Construction I	2
Art 183—Freehand Drawing	2
Math. 137—Calculus	3
Physics 101—General Physics	5
Physical Education	1

SECOND SEMESTER	15 HOURS
Arch 113—History of Ancient Architecture	2
Arch. 132—Architectural Design	3
Arch. 142—Materials and Methods of Construction II	2
Art 184—Freehand Drawing	2
Math 147—Calculus	3
T.A.M. 150—Analytical Mechanics	2
Physical Education	1

College of Liberal Arts and Sciences

The College of Liberal Arts and Sciences at the Chicago Undergraduate Division offers the first two years of work in the several professional, pre-professional, and general curricula offered in this college at the Urbana campus. In all these curricula, the first two years are devoted to general basic education with increasing specialization in the last two years. A student who is not certain of his vocational objective at the time of his admission to college has an opportunity to do considerable educational exploration in his first two years and to change his vocational objective without additional time. Such a change after the beginning of the junior year usually can not be made without loss of time.

It is assumed that upon completion of the two years' work in the Chicago Undergraduate Division students will transfer to the Urbana campus to continue in their chosen field at the junior level. Students desiring to transfer to institutions other than the Urbana campus of the University of Illinois should familiarize themselves with the requirements of the school of their choice so that they may plan their work most effectively while at the Chicago Undergraduate Division.

The following Liberal Arts and Sciences curricula are offered at the Chicago Undergraduate Division: general, chemistry, chemical engineering, pre-medicine, pre-dentistry, pre-nursing, teacher-education, pre-law, pre-veterinary medicine, and pre-journalism. Content of the courses closely parallels that given on the Urbana campus of the University of Illinois

General Curriculum

All students who do not elect to follow one of the specialized curricula described below enroll in the general curriculum. The general curriculum requires a number of basic courses in literature or philosophy, social studies and natural sciences, and a reading knowledge of at least one foreign language. Each student must select a major and a minor or a split minor in a field of concentration the last two years.

Because of the wide range of courses open to students in the general curriculum, it is not feasible to specify definite sequences of courses to be taken by any student in each of the four years of this curriculum. Under the guidance of an adviser, each student is expected to plan his own pro-

Six convocations of a popular educational nature are presented each year.

gram within the general requirements outlined below. Students at the Chicago Undergraduate Division will find it to their advantage to complete the group requirements listed on pages 57 and 58 in their first four semesters in the University.

SUMMARY OF REQUIREMENTS FOR GRADUATION

Each candidate for the degree of A.B. or B.S. in the general curriculum of Liberal Arts and Sciences must meet the following requirements:

Hygiene—Hygiene 101 or 104.

Physical Education — Four semesters.

Military Science—Four semesters, except that men transferring from the Chicago Undergraduate Division with sixty hours are exempt from this requirement.

Rhetoric—Rhetoric 101 and 102. (A student with "C" or "D" in Rhetoric 102 must pass qualifying examination to take Rhetoric 200.)

Foreign Language — Equivalent of two college years in same language.

U. S. History—One unit of American History in high school or History 151 and 152.

Mathematics — One unit of algebra and one unit of plane geometry in high school or Mathematics 101 and 102.

Major — Twenty approved hours in one department.

Minor(s) — Twenty approved hours in one or two departments.

Advanced hours — Thirty hours of credit in courses not open to freshmen and sophomores.

Residence—Either first ninety hours uninterrupted, or last thirty hours uninterrupted at the University of Illinois. For students at the Chicago Undergraduate Division, the junior or senior year (thirty semester hours) must be taken at Urbana.

Average—3.0 ("C") minimum average.

Biological Sciences[1]—Eight hours.

Physical Sciences[1]—Eight hours.

Humanities[1]—Eight hours.

Social Sciences[1]—Eight hours.

Total hours — 120 hours, excluding basic military and all physical education courses, with not more than one quarter of the work with a grade of "D."

REQUIRED SUBJECTS

1. **Foreign Language.** A reading knowledge of a foreign language (French, German, Greek, Italian, Latin, Portuguese, Russian, or Spanish) equivalent to that resulting from four semesters of study of a foreign language commenced in college. To be begun in the first semester of the freshman year, except as otherwise provided, and to be continued until the requirement is completed. This requirement is satisfied by passing French 104, German 104 or 144, Greek 202, Italian 104, Latin 104 or 105, Portuguese 104, Russian 204, Spanish 104, or a more advanced

[1] The eight hours must be taken in approved sequence.

course in any of these languages. Proficiency examinations are offered in French, German, and Spanish. Note: No credit toward graduation is given for a beginning course in a foreign language unless it is continued through a full year. Students planning to enter a graduate college are advised to obtain a reading knowledge of both French and German.

2. **Group Requirements.** To be begun in the freshman year and completed before the senior year. Students at the Chicago Undergraduate Division will find it to their advantage to complete these requirements by the end of their fourth semester. Proficiency examinations may be taken for credit in some of these subjects.

Basic Knowledge. From high school: one unit of American history or History 151 and 152; one unit of algebra and one unit of plane geometry or Mathematics 101 and 102.

General Education. An approved two-semester course or sequence of courses in each of the following areas, with a minimum of eight hours credit in each: (a) humanities, (b) biological sciences, (c) physical sciences, (d) social sciences.

Architecture exhibit attracts visitors.

1. **Liberal Arts and Sciences.** Any course offered in the College of Liberal Arts and Sciences may be used as an elective.

2. **Other Colleges.** Electives totaling as much as but not more than thirty-two hours may be taken in other colleges and schools of the University and counted toward graduation from this college, in addition to the courses acceptable for major and minor requirements, if such electives are in conformity with the following list approved by the faculty:

Accountancy. A total of 6 hours (including not more than one of the following courses: Accountancy 101, 102, 201).

Agricultural Economics. A total of 6 hours.

Architecture. A total of 15 hours.

Art. A total of 15 hours unless the student is majoring in history of art.

Aviation. A total of 3 hours.

Business Law. A total of 6 hours.

Economics. All courses.

Education. A total of 20 hours.

Engineering. A total of 10 hours.

Food Technology. A total of 6 hours.

Forestry. A total of 3 hours.

Home Economics. All courses.

Horticulture. A total of 6 hours.

Hygiene. Hygiene 101 or 104 (2 hours.)

Journalism. A total of 10 hours.

Landscape Architecuture. A total of 7 hours.

Law. A student of senior standing with an average of 3.5 who has been in residence either the first two years or the last year of his pre-legal work may take and count toward the A.B. degree not to exceed 32 hours in the College of Law, provided that not less than two courses amounting to at least 5 hours a semester are taken with the advice of the Dean of the College of Law, and provided further that if any such student desires to take more than 6 hours of law work he must also register in the College of Law.

Library Science. A total of 20 hours.

Management and Marketing. A total of 6 hours. Typing, secretarial training, and shorthand may not be counted for credit.

Military Training. A total of 8 hours in advanced courses.

Music. A total of 15 hours approved by the Director of the School, unless the student is majoring in music.

Physics. All courses.

Chemistry and Chemical Engineering

The minimum language requirement for graduation in the following curricula in chemistry and chemical engineering is the equivalent of two years of college work in German or French. When a student does not offer either German or French for entrance, the second year of the language required for graduation may be counted as an elective in either curriculum.

Students who enter with inadequate preparation in chemistry, mathematics, and foreign languages in high school will find it difficult to complete their professional training in chemical engineering in four years.

The optional five-year curriculum is recommended especially for those who do not qualify for Chemistry 107 and Mathematics 117, and who do not have two units of high school credit in French or German. Students should note that they must have a 3.5 general average for registration in these curricula after they have attained junior standing.

Curriculum in Chemistry

FIRST YEAR — FIRST SEMESTER	17 HOURS
Chem. 107—General Chemistry and Qualitative Analysis[1]	5
German or French	4
Math. 117—Freshman Mathematics[2]	5
Rhet. 101—Rhetoric and Composition	3
Physical Education	

SECOND SEMESTER	18 HOURS
Chem. 108—General Chemistry and Qualitative Analysis	5
German or French	4
Math. 127—Freshman Mathematics[2]	4
Hygiene101—Personal and Environmental Hygiene, or Hygiene 104—Personal and Community Health	2
Rhet. 102—Rhetoric and Composition	3
Physical Education	

SECOND YEAR — FIRST SEMESTER	16 HOURS
Chem. 124—Quantitative Analysis	5
Math. 137—Calculus	3
Physics 106—Mechanics	5
Physical Education	
Electives[3]	3

SECOND SEMESTER	15 TO 18 HOURS
Chem. 234—Organic Chemistry	5
Math. 147—Calculus	3
Physics 107—Electricity, Magnetism, Modern Physics	5
Physical Education	
Electives[3]	2 to 5

Curriculum in Chemical Engineering (Four Years)

FIRST YEAR — FIRST SEMESTER	17 HOURS
Chem. 107—General Chemistry and Qualitative Analysis[4]	5
G.E. 106—Elements of Drawing	3
Hygiene 101—Personal and Environmental Hygiene, or Hygiene 104—Personal and Community Health	2
Math. 122—Analytic Geometry[5]	4
Rhet. 101—Rhetoric and Composition	3
Pyhsical Education	

SECOND SEMESTER	17 HOURS
Chem. 108—General Chemistry and Qualitative Analysis[4]	5
Math. 132—Calculus[5]	5
Physics 106—Mechanics	4
Rhet. 102—Rhetoric and composition	3
Physical Education	

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[1] All students with entrance credit in chemistry are required to take a proficiency examination before registering for Chemistry 107. Those who do not show the necessary proficiency will be placed in Chemistry 101 or 102, after which they will take Chemistry 106 and 110. For students without entrance credit in chemistry, the required sequence is Chemistry 101, 106, and 110.

[2] For students who do not take Mathematics 117-127, the required sequence is Mathematics 112 (or 111), 114 (or 115), 122, 132, and 142.

[3] Suggested courses for electives are Biology 101, 111, 121, 131, 132; English 121, 122, 123; Geology, 130, 150; History 151, 152; German or French. Of the total electives for graduation, at least twelve hours should be from advanced courses in chemistry and at least ten hours from courses offered by other departments.

[4] Students without entrance credit in chemistry take the sequence Chemistry 101, 106, 110, 124, etc.

[5] Students without the required entrance credits in mathematics take Mathematics 112 (or 111), 114 (or 115), 122, and 142.

SECOND YEAR	FIRST SEMESTER	16 HOURS
Chem. 124—Quanitative Analysis		5
German or French[1]		4
Math. 142—Calculus		3
Physics 107—Electricity, Magnetism, Modern Physics		4
Physical Education		

SECOND SEMESTER	17 HOURS
Chem. 140—Elementary Physical Chemistry[2]	5
Chem. 241—Elementary Physical Chemistry Laboratory[2]	1
German or French[1]	4
Physics 108—Heat, Sound, Light	4
T.A.M. 150—Analytical Mechanics (Statics)	2
Physical Education	
Electives[3]	3

Optional Curriculum in Chemical Engineering (Five Years)

FIRST YEAR	FIRST SEMESTER	15 TO 17 HOURS
Chem. 101 or 102—General Chemistry[4]		5 or 3
German or French		4
Math. 117—Freshman Mathematics[5]		5
Rhet. 101—Rhetoric and Composition		3
Physical Education		

SECOND SEMESTER	18 HOURS
Chem. 106—Inorganic Chemistry	5
German or French	4
Hygiene 101—Personal and Environmental Hygiene, or Hygiene 104—Personal and Community Health	2
Math. 127—Freshman Mathematics[5]	4
Rhet. 102—Rhetoric and Composition	3
Physical Education	

SECOND YEAR	FIRST SEMESTER	17 HOURS
Chem. 110—Qualitative Analysis		5
German or French		4
Math. 137—Calculus		3
Physics 106—Mechanics		5
Physical Education		

SECOND SEMESTER	18 HOURS
Chem. 106—Inorganic Chemistry	5
German or French	4
Hygiene 101—Personal and Environmental Hygiene, or Hygiene 104—Personal and Community Health	2
Math. 127—Freshman Mathematics[5]	4
Rhet. 102—Rhetoric and Composition	3
Physical Education	

Curriculum in Physics

The curriculum in physics is recommended for students who plan to enter graduate study in physics or who wish to prepare to enter government or industrial laboratory research positions upon attaining the B.S. degree. It specifies the courses essential to a strong founda-

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[1] Two years of French and/or German are required for the B.S. degree. Two units of high school credit in either of these languages is equivalent to one year of college credit. Students entering without German or French in high school may substitute the second year of the language requirement for the six hours of electives referred to in footnote 3.

[2] Not given at Chicago Undergraduate Division.

[3] Six hours of electives must be chosen from the Divisions of Humanities or Social Sciences with the approval of the adviser. The courses are intended to broaden the engineer and provide an interest and liberal education in history, language, literature, philosophy, political science, or public speaking.

[4] Students who qualify for Chemistry 107 should take the Chemistry 107, 108, 124, 240 sequence rather than Chemistry 101, 106, 110, 124 and thus have five additional hours of advanced electives.

[5] For students who do not take Mathematics 117-127, the required sequence is Mathematics 112 (or 111), 114 (or 115), 122, 132, and 142.

The Student Counseling Bureau provides both vocational and personal advice.

tion in physics and permits concentration in the first two years on basic courses which are prerequisite to advanced courses in physics and mathematics.

It is planned for a student entering with four years of high school mathematics, including trigonometry (see, however, footnote 1 following curriculum), a year of chemistry and no French or German. A student who can satisfy the college language requirement on entering has the distinct advantage of adding 16 hours of electives to his course of study. A student who has a year of high school biology will also have more freedom in choice of electives (see footnote 4 following curriculum).

To enter the physics curriculum, an entering freshman must rank in the upper half of his high school class. To be permitted to register in advanced physics or mathematics courses in this curriculum students must have a grade average of at least 3.5 in all subjects, exclusive of the basic courses in military science and physical education, and a combined grade average of at least 3.5 in all courses completed in physics and mathematics. Transfer students must have a corresponding record in the institution from which they transfer.

FIRST YEAR	FIRST SEMESTER	16 HOURS
Math. 123—Analytic Geometry[1]		5
Chem. 103—General Chemistry[2]		4
German or French[3]		4
Rhet. 101—Rhetoric and Composition		3
Physical Education		1

SECOND SEMESTER	16 HOURS
Math. 133—Calculus[1]	3
Chem. 104—Chemistry of the Metallic Elements[2]	4
German or French[3]	4
Rhet. 102—Rhetoric and Composition	3
Hygiene 101—Health Lectures	2
Physical Education	1

SECOND YEAR	17 HOURS
Math. 143—Calculus[1]	5
Physics 106—General Physics	4
German or French[3]	4
Elective[4]	4
Physical Education	1

SECOND SEMESTER	15 HOURS
Math. 343—Advanced Calculus	3
Physics 107—General Physics	4
German or French[3]	4
Elective[4]	4
Physical Education	1

Pre-medical Curriculum

Any freshman whose scholastic rank is in the upper half of his high school graduating class, on matriculating in the College of Liberal Arts and Sciences, is eligible for admission to the pre-medical curriculum. Pre-medical students must maintain a 3.5 average, or they will be transferred to the general curriculum. A student transferring to this college with advanced standing must meet the scholastic requirements at the level at which he transfers, in terms of the University's grading system, in order to be admitted to the pre-medical curriculum.

Other factors being equal, students at the University of Illinois who have completed the pre-medical curriculum with an average of 4.3 or better, will be given preferential consideration by the Committee on

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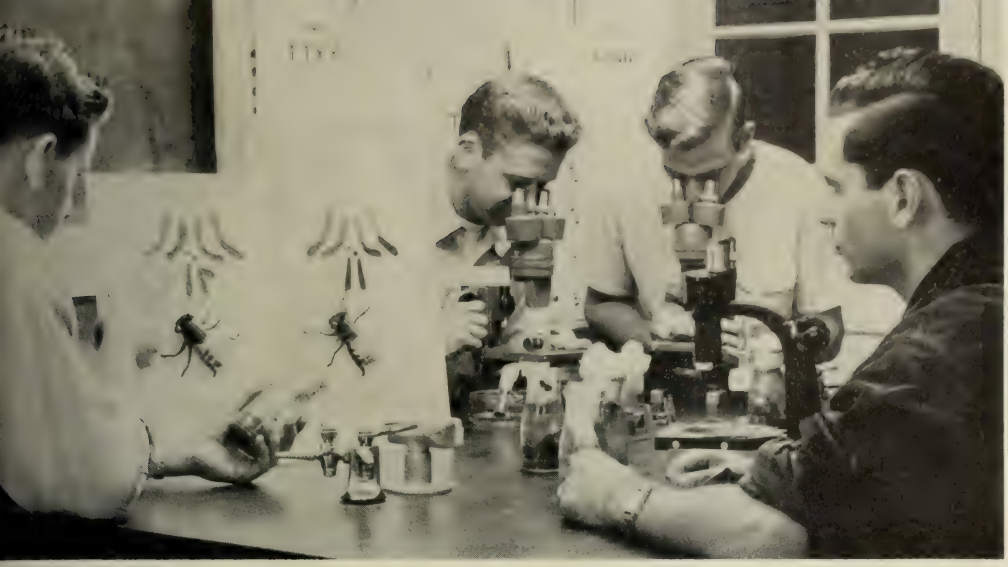
[1] The prerequisite to entering the stated sequence in mathematics is three to four years of high school mathematics, including trigonometry, and a satisfactory grade on the mathematics placement examination. Students having college credit for algebra and trigonometry are not required to take the examination. A student who does not meet the above prerequisite may meet the requirements in basic mathematics with the sequence Math. 112, 114, 122, 132, 142 (16 hours). A student who has completed Math. 117, 127, 137, 147, (15 hours) before entering the curriculum will have satisfied the basic mathematics requirements. For either of these sequences he will receive only 13 hours credit toward the degree.

[2] The chemistry requirement may be satisfied by a year of general chemistry selected from courses Chem. 101 through 108, or by the one-semester course, Chem. 109. A maximum of eight hours in general chemistry will be counted toward the degree, except that ten hours will be allowed for Chem. 107 and 108.

[3] The language requirement is a reading knowledge of German or French. A student planning to enter graduate study should attain a reading knowledge of both German and French.

[4] The elective subjects must include at least 24 hours of course work in humanities, social sciences, and biological sciences. The courses must satisfy the general education requirements of the college, except that students offering one unit or more of biology for admission may substitute additional courses in humanities and social sciences for biological sciences. Students will be advised to include six to eight hours of physics and three to six hours of mathematics among the remaining electives.



A biology laboratory.

Admissions, provided that at least the second and third years have been done within the University.

The specific requirements for admission to the College of Medicine at the University of Illinois are as follows:

	SEMESTER HOURS
Non-science Courses (32 semester hours required)	
English	6
Foreign Language	6
Social Sciences and Humanities (at least three hours from each area)	16
Electives	4
Laboratory Sciences (32 semester hours required)	
Biology (including laboratory courses in general and vertebrate zoology or comparative anatomy and in embryology)	10
Chemistry (including in addition to introductory courses, four hours of organic chemistry and three hours of quantitative analysis)	14
Physics (including laboratory work in mechanics, heat, sound, light, and electricity)	8
Free Electives	24
Total	88

Pre-dental Curriculum

Students applying for admission to the pre-dental curriculum must have ranked in the upper half of their high school graduating class. They must maintain at all times in the curriculum a minimum average of 3.5. The work covered by the first two years of the pre-medical curriculum enables students to meet the requirements for admission to the University of Illinois College of Dentistry. Since the function of the pre-dental years is

to supply a general background for the student as well as specific training in the fundamental concepts of the sciences, it is recommended that the elective hours also include history, economics, sociology, philosophy, and at least one modern language.

The specific requirements for admission to the College of Dentistry are as follows:

	SEMESTER HOURS
Chemistry (including three hours of quantitative analysis and four hours of organic chemistry—Chemistry 101 or 102, 105, 122, and 133)	12
Physics (Physics 101 and 102)	6
Biology (including general zoology[1])	6
Rhetoric and Composition (Rhetoric 101 and 102)	6
Electives (including history, economics, sociology, philosophy, and at least one modern language; excluding military, hygiene, and physical education)	30
Total	60

Pre-dental students who wish to be candidates for the degree of Bachelor of Science in Dentistry on the completion of the second year in the College of Dentistry should consult the College Catalog.

Pre-professional Curriculum in Nursing

The University offers a four-year collegiate program leading to the degree of Bachelor of Science in Nursing. The pre-professional curriculum, administered in Liberal Arts and Sciences, requires a mimimum of one year and the satisfaction of the following requirements:

	SEMESTER HOURS
Physical Education	2
Rhet. 101, 102	6
Chem. 102 (or 101), 132	6-8
Biology 101	4
Humanities	6-8
Social Science	6-8
Electives	
Total	32

The professional curriculum is given by the School of Nursing at the Chicago Professional campus of the University and requires at least eleven quarters of work. Admission to the professional curriculum is on recommendation of an admissions committee, but consideration by the committee requires a 3.0 average in pre-professional work and grades of at least "C" in chemistry and biology.

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[1] The general zoology requirement may be met by Biology 101 and 131, or Biology 101 with a grade of "B."

Continuation Program in Nursing

This program leads to the degree of Bachelor of Science in Nursing, which is conferred by the School of Nursing. It is open to graduates of Diploma schools of Nursing licensed by the state in which the school is located who meet the admission requirements of the General Curriculum in the College of Liberal Arts and Sciences, and who achieve a satisfactory score in the Graduate Nurse Qualifying Examinations of the National League for Nursing. The program consists of four semesters, plus one summer session or half semester of eight weeks. The first two semesters are in the College of Liberal Arts and Sciences, either in Urbana or at the Chicago Undergraduate Division, the third semester in the College of Liberal Arts and Sciences in Urbana, the remainder in the University of Illinois School of Nursing, with residence as indicated.

REQUIREMENTS FOR ADMISSION

Candidates shall apply to the College of Liberal Arts and Sciences for admission to the program, which will be granted upon fulfillment of the following conditions.

1. Certification by the University of Illinois School of Nursing that the candidate holds the Diploma in Nursing from an accredited school of Nursing, there received grades averaging 3.5 in theory and practice, and is recommended by the affiliated school.

2. Satisfaction of the requirements for admission to the general curriculum in the College of Liberal Arts and Sciences.

3. Certification by the University of Illinois School of Nursing that the candidate has achieved on the Graduate Nurse Test Battery of the National League of Nursing Education a score not lower than $1\frac{1}{2}$ s.d. below the mean of collegiate norms for each of the clinical fields. This certification shall entitle the candidate to a block credit of forty semester hours in Clinical Nursing.

4. Certification by the University of Illinois School of Nursing that the candidate has passed examinations (as set by the National League of Nursing Education) for advanced standing in microbiology (four semester hours) and anatomy and physiology (five semester hours).

5. Passing of examinations for advanced standing in rhetoric and composition (six semester hours), administered by the appropriate departments of the College of Liberal Arts and Sciences.

6. Failure to demonstrate proficiency in any or all of the fields listed under paragraphs 4 and 5 shall not preclude admission to the Continuation Program, but shall require adding to the candidate's program appropriate courses in the subjects indicated. Courses taken for making up such deficiencies shall not in any case count as electives within the sixty semester hours of the Continuation Program.

REQUIREMENTS FOR GRADUATION

Each candidate for the degree must earn 120 semester hours, including thirty hours of advanced work done in residence. Sixty of these hours shall be those specified in paragraphs 3, 4, and 5 under Admission, above. The remaining sixty hours, constituting the Continuation Program proper, must be passed with an over-all average of 3.0, and shall be made up as follows, subject to such rearrangement of courses or lengthening of the period of study as may be required because of entrance deficiencies, which should be removed within the first year.

FIRST YEAR — FIRST SEMESTER	HOURS	SECOND SEMESTER	HOURS
Chem. 102—General Chemistry	3	Chem. 132	3
Physics 105—Nurses' Physics	4	Psych. 150—Personality and Human Relations	3
Humanities	4	Humanities	4
Electives	4-6	Electives	5-7

SECOND YEAR — FIRST SEMESTER (URBANA) — **HOURS**

Ed. 211—Educational Psychology . . . 3
Phil. 105—Moral Ideas and Practice . . . 2
Social Sciences . . . 6 or 9

For students electing Community Nursing:
- Psych. 216—Child Psychology . . . 3
- Sociol. 220—Marriage and the Family . . . 3
- Sociol. 276—Sociology of the City, or Sociol. 277—Rural Social Problems . . . 3

For students electing Institutional Nursing:
- Psych 250—Psychology of Personality . . . 3
- Psych. 255—Social Psychology, or Psych. 338—Abnormal Psychology, or Sociol. 212—Culture Patterns and the Individual . . . 3

Electives (other courses in social sciences, or courses in the biological sciences, or other courses with permission of the Director of the School of Nursing, to total at least 15 hours)

SECOND YEAR — SECOND SEMESTER (URBANA OR CHICAGO)

Students transfer to the University of Illinois School of Nursing as candidates for the degree of Bachelor of Science in Nursing. Courses in this group will be offered alternately at the Chicago Professional Colleges and on the Urbana campus, if registration warrants.

Nursing 200—Principles of Health Teaching . . . 2
Nursing 301—Introduction to Community Nursing (for students electing Community Nursing), or Nursing 300—Introduction to Management in Nursing (for students electing Institutional Nursing) . . . 3
Nursing 302—Seminar in Trends and Problems in Nursing Services . . . 3
Electives (as required to bring total credit hours to 116 in this semester; minimum, 3 hours)

SUMMER SESSION OR HALF SEMESTER

Nursing 311—Field Practice in Community Nursing (for students electing Community Nursing), or Nursing 310—Field Practice in Management Nursing (for students electing Institutional Nursing) . . . 4

Pre-veterinary Curriculum

The two-year pre-veterinary curriculum in the College of Liberal Arts and Sciences is followed by the four-year curriculum in the College of Veterinary Medicine in Urbana. Students applying for admission to the pre-veterinary curriculum must rank in the upper half of their high school graduating class. Students transferring with advanced standing must have maintained at least a 3.5 average in terms of the University's grading system. Students must maintain at least a 3.5 average to remain in the curriculum.

The specific requirements for admission to the College of Veterinary Medicine at Urbana are as follows:

	SEMESTER HOURS
Chemistry (including organic and quantitative analysis—Chemistry 101 or 102, 105, 122, and 133)	16
Biological Sciences[1] (including botany and general zoology)	8
Physics (including laboratory—Physics 101 and 102)	8
Foreign Language	6
Rhetoric and Composition (Rhetoric 101 and 102)	6
Electives in not less than two of the following fields: economics, fine arts, language, geography, history, literature, philosophy, political science, psychology, sociology, speech. Approximately one-half of these credits should be in social sciences	9
Free electives	7
Total	60

The pre-veterinary curriculum is extremely rigid and failure to register in the prescribed courses in the proper sequence may result in an additional semester of study.

Pre-law Curriculum

The pre-legal courses constitute a highly important phase of the education of students planning the study of law, and this work should be planned with care. Students contemplating the study of law are advised to consult with the Student Counseling Bureau at the Chicago Undergraduate Division relative to their interests and aptitudes for law.

Students taking the curriculum leading toward degrees in both liberal arts and law comply with the graduation requirements in the general curriculum. Such students are urged to complete all of these requirements before entering the College of Law except the minor and advanced hours. The prospective law student is advised to choose his work, beyond those

[1] The biological sciences requirement may be met by Biology 101 and 131.

subjects prescribed in liberal arts, from among the following fields: English, with special emphasis on rhetoric and speech; political science; history, with emphasis on American and English constitutional history; economics; philosophy, and particularly logic; Latin; psychology; sociology; mathematics; and accountancy.

Home Economics Curriculum

Students planning to major in home conomics may profitably attend the Chicago Undergraduate Division for one year. Courses for the freshman program in home economics should be chosen only after consultation with the Dean of the College of Liberal Arts and Sciences.

Teacher Education Curricula

Of the curricula in teacher education which have been approved by the College of Liberal Arts and Sciences, preliminary work in thirteen curricula is offered at the Chicago Undergraduate Division as follows: biology, chemistry, English, French, geography, German, mathematics, mathematics and physical sciences, physics, social studies, Spanish, speech, and speech correction. In order to meet graduation and state certification requirements, these curricula are relatively rigid and failure to take the prescribed courses of the first two years within that time may result in an additional semester of undergraduate work.

While these curricula vary considerably from one another, the common core of the first two years is as follows:

	FIRST YEAR	SECOND YEAR
	SEMESTER HOURS	
Physical Education	2	2
Hygiene 101 or 104	2	
Rhetoric 101, 102	6	
Speech 101	3	
Foreign Language (until a 104 course is completed)	8	8
Science	6-8	
English or Social Studies as required		6-8
Specific requirements, Education 101, History 152, Political Science 150, Psychology 100		12
Work in major teaching field and electives	3-7	4-6
Total	32-34	32-34

The first two years of the elementary education curriculum, which is designed to meet the requirements for teaching in the elementary and kindergarten-primary grades of Illinois schools, are also administered by this college.

The work of the first two years in this curriculum has the following pattern:

	FIRST YEAR	SECOND YEAR
	SEMESTER HOURS	
Physical Education	2	2
Hygiene 101 or 104	2	
Rhetoric 101, 102	6	
Speech	2-3	
Language arts	6-8	
Science, biological and physical	8	8
Social Studies	8	
Specific requirements, Education 101, Geography 104, History 152, Political Science 150, Psychology 100		15
Electives		7-9
Total	34-36	32-34

Admission to the curricula preparatory to teaching deaf and hard-of-hearing children and mentally handicapped children requires the meeting of qualitative and physical requirements and a personal interview. The determination of courses will be made with a teacher education advisor.

Pre-Journalism Curriculum

Students planning to enter the School of Journalism and Communications register as pre-journalism freshmen and sophomores following the general curriculum in the College of Liberal Arts and Sciences. Courses in English literature and rhetoric, foreign languages, physical sciences, and social studies are recommended as desirable preparation for the profession of journalism. The ability to use a typewriter should be acquired before entering this school.

For admission to the School of Journalism and Communications as a candidate for a degree, a student must have completed fifty-six semester hours of work in one of the undergraduate curricula, exclusive of required courses in physical education and military training, with an average grade of 3.5 (one-half of the college work with an average grade of "B" and one-half with an average grade of "C"). An applicant for admission will find it to his advantage to include in his pre-journalism curriculum at least six hours of rhetoric and composition, twelve hours of history, political science, economics, and sociology, and ten hours of science, including mathematics.

The School of Journalism and Communications offers the following curricula: editorial, advertising, publication management, and radio-television.

School of Physical Education

All students entering the University as freshmen are required to obtain four hours of credit in physical education. Each student is given a health examination and a motor fitness test before registration. The findings by the Health Service and the testing division are used as a basis for prescribing each student's immediate physical education program. Students with handicapping physical defects are assigned to prescribed activities. Students with low scores in motor fitness are assigned to basic physical fitness courses.

Students who are organically sound and demonstrate a fair degree of motor fitness are permitted to elect from a variety of activity courses. All general courses in physical education meet three times a week for one hour or two times a week for one and one-half hours. All general courses in physical education carry one hour of credit.

Women students entering the University as freshmen are required to obtain credit for four semester hours of work in physical education; those entering the University with sophomore standing are required to obtain credit for two semesters of work in physical education. Women are offered instruction in elementary, intermediate, and advanced rhythms, individual gymnastics, basketball, volleyball, softball, badminton, tumbling, apparatus stunts, fundamentals of motor fitness, archery, games for school and playground, folk and square dance, boating and fishing, swimming, golf, and bowling. Women's physical education classes are held in the Auditorium at the east end of the Pier. Through the Women's Athletic Association and Orchesis, the modern dance group, women students are offered wide opportunities for extra-curricular activities in sports and the dance.

Men students entering the University with less than sixty semester hours credit are required to secure four semesters of credit in physical education, including the amount transferred. In addition to intercollegiate and intramural athletics, men students in the physical education classes are offered instruction in volleyball, badminton, swimming, individual tumbling, double tumbling, apparatus stunts, boxing, wrestling, weight lifting, archery, boating and fishing, personal defense activities, and a basic physical fitness program.

Veteran students who have fulfilled the four-hour physical education requirement while in the service are exempt from taking physical edu-

cation. Veterans are encouraged to utilize the physical education facilities, but additional credit will not be granted except as elective credit in the College of Commerce and Business Administration.

In addition to the service program, the Physical Education Department offers the first two years of the professional training curricula leading to the degrees of Bachelor of Science in Physical Education, in Health Education, and in Recreation. Complete information concerning the professional training curricula is available at the office of the Director of Physical Education.

Army Reserve Officers' Training Corps

Authorization

The Reserve Officers' Training Corps (R.O.T.C.) is organized under authority of the Act of Congress of June 3, 1916, and was activated at the University of Illinois, Chicago Undergraduate Division, in September, 1950.

Educational Aim

The fundamental educational aim of the R.O.T.C. is to make the student conscious of his duties and responsibilities to his government as a citizen of this nation and, to so prepare him, that in time of national emergency he can fulfill his responsibility in accordance with his training and capabilities.

The broad aspect of the military training program gives the student a training which is as valuable to him in his civilian career as it is in his service to his country in time of emergency. The program offers a wide variety of work that is fundamental in nature. It should instill in the student an indelible impression of the place of the armed forces in the American democracy, and of the extent to which our military organization is dependent on the productive capacity of the nation.

Physical Training

A military unit is largely dependent for its efficiency upon the physical fitness of the individuals composing it. Therefore, it is the policy to encourage and support the physical training given by civilian instructors.

ROTC review parade.

Participation

The R.O.T.C. course is offered to qualified male students on a volunteer basis. Qualifications for enrollment in the R.O.T.C. are that the student be regularly enrolled in the University, be a citizen of the United States, be within specified age limits, be physically qualified, and be approved by the Professor of Military Science and Tactics.

Program of Instruction

College level R.O.T.C. instruction is divided into two parts: the basic course, which comprises the first two years of the program, and the advanced course, comprising the last two years of the program. Only the first three years of this program are offered at the Chicago Undergraduate Division.

Basic Course

The first two years of military training are designated as the basic course. Students in the basic course will devote three hours a week to military instruction which will consist of two hours of classroom instruction and one hour of drill. Accreditation for the basic course is one hour each semester. A student entering the University of Illinois after successfully completing military training at a high school or preparatory school which has an accredited Junior Division R.O.T.C. program will be entitled, upon enrollment, to such credit as may be determined by the Professor of Military Science and Tactics. In no case will this credit exceed the first year of the basic course. Students intending to enroll in the basic course must not have reached the age of twenty-three at the time of enrollment.

Advanced Course

The advanced course of the R.O.T.C. leads to a Reserve or Regular commission in the Army. The first year of advanced course training in Infantry is offered to students who have successfully completed the two-year basic course or to veterans of the Army, Air Force, Navy, and Marine

Corps who have completed one year of active service in the Armed Forces and have been honorably discharged. Students enrolling initially in the advanced course must not have reached their twenty-seventh birthday at the time of enrollment. Any student desiring entrance into the advanced course must be prepared to complete the course. The objective of the advanced course is to produce college-trained junior officers to meet the needs of the Army Reserve, National Guard, and Regular units.

The advanced course consists of five hours of instruction each week' four hours of which is classroom instruction and one hour of drill. Accreditation for the advanced course is three credit hours each semester. All candidates for a Reserve commission must have reached an age of not less than twenty-one years, completed four years of education at college or university level, and successfully completed the advanced course which includes a summer encampment. The encampment is of approximately six seeks duration and is usually held at the end of the first year of the advanced course. Students completing all requirements for a Reserve commission, but who have not reached the age of twenty-one will be given a certificate of capacity and a temporary commission and will receive the Reserve Officer Commission shortly after their twenty-first birthday. Those with distinguished records in R.O.T.C. are selected for consideration for Regular commission in the Army.

All members of the advanced course will receive the following: monetary allowance in lieu of subsistence, officer-type uniform, the pay of the first enlisted grade while at the advanced summer encampment, and all necessary texts and materials on a loan basis.

Deferment from Selective Service

Deferment from Selective Service is granted for completion of the four-year course to those students who are qualified and approved by a deferment board composed of military and civilian faculty personnel. Deferred students will retain their deferment throughout their course in military, provided they maintain the required standards.

Clothing and Equipment

All students enrolled in the R.O.T.C., including the basic course, receive an Army officer-type uniform and textbooks at government expense. Equipment and supplies are provided on a loan basis and must be returned at the close of the school year. A deposit of $10 is required prior to the issue of equipment. This deposit, through the Military Property Custodian, is refundable at the close of the school year.

Courses of Instruction

Accountancy

101. Principles of Accounting. Simple transactions, general ledger accounts, books of original entry, closing process, trial balances, financial statements, accounting for negotiable instruments, controlling accounts, adjusting entries. Students who present one unit of bookkeeping for entrance should register in Accountancy 102. They will not be allowed full credit in Accountancy 101 unless high school bookkeeping credit can be dropped. I, II; 3. Students with 95 or more credit hours receive only 2 hours credit.

102. Principles of Accounting. Similar to Accountancy 101. For those who present one unit of entrance credit in bookkeeping. Students who have failed in Accountancy 101 are permitted to register in Accountancy 102 and receive credit as in Accountancy 101 if their final grade is "C" or above. I, II; 2. Students with 95 or more credit hours receive only 1 hour credit.

105. Accounting Procedure. Relation of business documents to the accounts; fundamentals of partnership and corporation accounting; business forms and records; financial statement analysis. I, II; 3. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: Accountancy 101 or 102.

106. Elementary Cost Accounting. Accounting for production management. Principles and methods of accounting for managerial control of costs of production. I, II; 3. Prerequisite: One year of accountancy; sophomore standing; credit or registration in Economics 102 or 108.

108. Intermediate Accounting. Consideration at the intermediate level of accounts and transactions peculiar to the partnership and corporation types of organization; interpretation of financial statements and analysis of the principal accounts represented therein. I, II, 3. Prerequisite: Sophomore standing; Accountancy 105.

Architecture

101. Introduction to Architecture. Introduction to the building industry and the profession of architecture, exercises illustrating basic architectural forms and their organization. I, II; 3.

113. History of Ancient Architecture. A description and analysis of the development of the architecture of the ancient East, Greece, and Rome, related to the environmental and cultural setting. I, II; 2. Prerequisite: Architecture 131 or sophomore standing.

131. Architectural Design. Beginning study of architectural planning and designing. Fundamentals of sketching and presentation. I, II; 3. Prerequisite: Architecture 101; registration in General Engineering 108.

132. Architectural Design. Continued study of the fundamentals of architectural design. I, II; 3. Prerequisite: Architecture 131 or consent of instructor.

133. Architectural Design. Continued study of architectural planning and designing; principles of plan, elevation, and section in small buildings. I, II; 3. Prerequisite: Architecture 132.

141. Materials and Methods of Construction I. Wood frame construction as used in houses; manufacture and performance characteristics of materials; framing systems; typical details; finishing materials. I, II; 2. Prerequisite: Registration in Architecture 131.

142. Materials and Methods of Construction II. Non-fire resistance construction; manufacture and performance characteristics of materials; support systems; typical details; finishing materials. Lectures and drawings. I, II; 2. Prerequisite: Architecture 141.

Art

111. Introduction to Ancient and Medieval Art. Cultural analysis of the interrelated fields of architecture, sculpture, painting, and other humanistic studies previous to the Italian Renaissance. I; 3.

112. Introduction to Renaissance and Modern Art. Cultural analysis of the inter-related fields of architecture, sculpture, painting, and other humanistic studies beginning with the Italian Renaissance and continuing through the modern period. II; 3.

115. Art Appreciation. An introduction to the factors inherent in architecture, sculpture, painting, and other arts. Primarily for non-art students. I, II; 3.

181. Freehand Drawing. Simple groups of block form, still life, and casts in pencil and charcoal. Primarily for students in architecture and landscape architecture. I, II; 2.

182. Freehand Drawing. Simple groups for block form, still life, and casts in pencil and charcoal. Primarily for students in architecture and landscape architecture. I, II; 2. Prerequisite: Art 181.

183. Freehand Drawing. Charcoal drawing from the cast; water color. Primarily for students in architecture and landscape architecture. I, II; 2. Prerequisite: Art 182.

184. Freehand Drawing. Charcoal drawing from the cast; water color. Primarily for students in architecture and landscape architecture. I, II; 2. Prerequisite: Art 183.

Biological Sciences

101. Fundamentals of Biology. This course is designed to give a fundamental understanding of plant and animal life and their reproduction. It is not a survey of the plant and animal kingdoms, but is rather a scientific examination of the manner and means whereby plants and animals live and reproduce their kind. Lectures, laboratory, and quiz. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. Credit will not be given for both Biol. 101 and D.G.S. 131.

102. Fundamentals of Biology, continued. Application of biological principles to the living world. Lectures, laboratory, and quiz. I, II; 4. Prerequisite: Biol. 101. Credit will not be given for both Biol. 102 and D.G.S. 132.

111. General Botany. A survey of the plant kingdom. The morphology and physiology of representative plants from thallophytes through angiosperms are considered in building up a system of natural classification based upon phylogenetic relationships. The importance of plants in the system of nature and human economics is emphasized. Lectures, laboratory, and quiz. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Biology 101.

115. Introductory Systematic Botany (Plant Taxonomy). Classification and identification of flowering plants, with special reference to the local flora, and the needs of high school teachers. Occasional field trips required. Lectures, laboratory, and quiz. I, II; 4. Stu-

dents with 95 or more credit hours receive only 3 hours credit. Prerequisite: Biology 101 and 111.

116. Economic Botany. Lectures and demonstrations of the uses of plants and plant products by man. The origin and distribution of native and cultivated plants and their relation to human history. Forest, drug, food, textile, beverage, and other industrial institutions. Lectures and discussion. II; 3. Prerequisite: Biology 101 and 111.

121. Microbiology. A study of microorganisms and their role in the system of nature. Among the microorganisms are included the viruses and the microscopic multicellular plants and animals, as well as the protozoa and bacteria. Primary emphasis will be placed upon the bacteria. The systematic evolutionary, physiological, and ecological relationships of these organisms with both plant and animal worlds will be considered. Lectures, laboratory, and quiz. I, II; 4. Prerequisite: Biology 101.

126. Advanced General Bacteriology. General technic, special apparatus, and methods. Lectures, laboratory, and quiz. II; 4. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Biology 101 and 121; credit or registration in Chemistry 105.

131. General Zoology. A survey of the animal kingdom, the phylogenetic relationships of animals and classification. Emphasis is placed upon economically important and parasitic forms. Lectures, laboratory, and quiz. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Biology 101.

132. Comparative Vertebrate Anatomy. Classification and distribution of the vertebrate animals. Comparative anatomy of organs and organ systems, their function and evolution. Lectures, laboratory, and quiz. I, II; 5. Prerequisite: Biology 101 and 131, or Biology 101 with a grade of "B".

136. Bird Study. Native birds; their identification, food relations, seasonal distribution, migration activities, economic importance, and conservation. II; 2.

141. Vertebrate Physiology. This course is designed to furnish an understanding of the basic physiological activities of the vertebrate organism. Lectures, laboratory, and quiz. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Biology 101.

142. Physiology of the Nervous System. This course is planned to give an understanding of the physiological activities by which the nervous system carries out its function. Recommended as background for students of psychology, education, or biological sciences. Lectures, laboratory, and quiz. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Biology 101 and 141.

333. Vertebrate Embryology. The development of the vertebrate body and its organs. Lectures, laboratory, and quiz. I, II; 5. Prerequisite: Biology 101 and 132; junior standing.

Business Law

100. Basic Principles of Business Law. Basic principles of business law, covering the subjects of contracts, sales, negotiable instruments, and agency. Credit toward graduation will not be given for Business Law 201 or 261 in addition to Business Law 100. I, II; 3. Prerequisite: Accountancy 105; Economics 102; forty-five credit hours.

Chemistry

101. General Chemistry. For students who have no entrance credit in high school chemistry, or whose preparation is inadequate for Chemistry 102. I, II; 5. Students with 95 or more credit hours receive only 3 hours credit. Students who have received entrance credit for high school chemistry are given only 3 hours credit for Chemistry 101. Prerequisite: One unit of entrance credit in physics, or 2½ units of entrance credit in mathematics, or credit in Mathematics 111 or 112.

102. General Chemistry. For students who have had one year of high school chemistry. I, II; 3. Students with 95 or more credit hours receive only 2 hours credit. Students who have not used their high school chemistry for entrance may receive 5 hours credit for Chemistry 102 if they complete the course with a grade of "C" or higher. Prerequisite: One unit of entrance credit in chemistry or equivalent.

103. General Chemistry. Lectures, recitations, and laboratory. For engineering students who have had no chemistry. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. Students who have received entrance credit for high school chemistry are given only 3 hours credit in Chemistry 103. Prerequisite: One unit of

entrance credit in physics, or 2½ units of entrance credit in Mathematics, or credit in Mathematics 111 or 112.

104. Chemistry of the Metallic Elements. Lectures, recitations, and laboratory. Limited to students in the engineering curricula. I, II; 4. Credit in Chemistry 104 will not be granted to students who have received credit in Chemistry 105 or 106. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Chemistry 101, 102, or 103.

105. Inorganic Chemistry and Qualitative Analysis. Lectures, recitations, and laboratory. For students in the ceramic engineering curriculum and for students who are not eligible for Chemistry 104 or 106. I, II; 5. Credit in Chemistry 105 will not be granted to students who have received credit in Chemistry 104 or 106. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Chemistry 101, 102 or 103.

106. Inorganic Chemistry. Metallic elements. For students in the chemistry curriculum and for chemistry majors who are not premedical students. I. II; 5. Credit in Chemistry 106 will not be granted to students who have received credit in Chemistry 104 or 105. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Chemistry 101, 102, or 103.

107. General Chemistry. For students in the curriculum in chemistry or chemical engineering. Lectures, recitations, and laboratory. I; 5. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Excellent high school background in chemistry as shown by a placement examination.

108. General Chemistry and Qualitative Analysis. For students in the curriculum in chemistry or chemical engineering. Lectures, recitations, and laboratory. II; 5. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Chemistry 107.

109. General and Inorganic Chemistry. A course in general chemistry and the chemistry of the inorganic elements and compounds, completing in one semester the work usually taken in two. Open only to those who have had high school chemistry and who graduated from high school in the highest quarter of the class. Students who plan to specialize in chemistry or chemical engineering are advised to register in Chemistry 107 rather than Chemistry 109. Premedical

students requiring more than five hours of general-inorganic chemistry are advised to take a two-semester sequence instead of Chemistry 109. I, II; 5. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: High school chemistry; graduation from high school in the upper quarter of the class.

110. Qualitative Analysis. Qualitative analysis of metals and inorganic compounds. Open to all students; required of students whose major is chemistry or chemical engineering and those registered in the curriculum in chemistry except students who qualify for Chemistry 107 and 108. I, II; 5. Prerequisite: Chemistry 106.

122. Elementary Quantitative Analysis. Gavimetric and volumetric analysis, stoichiometrical relations, practical applications. I, II; 5. Prerequisite: Chemistry 104, 105, or 106.

124. Quantitative Analysis. For all students in the chemistry curriculum and chemical engineering. I, II; 5. Prerequisite: Chemistry 110 or satisfactory record in Chemistry 107 and 108.

132. Elementary Organic Chemistry. This course does not satisfy the organic chemistry prerequisite for Chemistry 350, 354, or 355. Beginning course in organic chemistry especially for students in pre-nursing curriculum and in the continuation nursing curriculum. II; 3. Prerequisite: Chemistry 101 or 102, or equivalent.

133. Elementary Organic Chemistry. To fulfill the requirements for premedical, predental, preveterinary, dietetics, and home economics students. Lectures, recitations, and laboratory. I, II; 5. Prerequisite: Chemistry 105 or 110.

234. Organic Chemistry. For students whose major is chemistry, or for those registered in the curriculum of chemistry or chemical engineering. I, II; 5. Prerequisite: Chemistry 124.

247. Elementary Physical Chemistry. For premedical students only. Lectures and laboratory. I, II; 4. Prerequisite: Chemistry 122 and 133; Physics 102 or 104, or equivalent.

Civil Engineering

105. Surveying. Use of transit, level, and tape; fundamental surveying procedures and office computations; land surveying. I, II; 2. Prerequisite: General Engineering 101; Mathematics 123.

106. Surveying. Topographic surveying; field astronomy; route surveying; stream gaging; introduction to photogrammetry. I, II; 3. Prerequisite: Civil Engineering 105; credit or registration in General Engineering 111.

115. General Surveying. Use and care of surveying instruments; methods of making engineering surveys; computations of areas and volumes; contour problems; transit stadia mapping methods. I, II; 3. Prerequisite: General Engineering 101 or 104; Mathematics 114.

160. Building Construction. Materials, types of construction, and details for buildings. I, II; 3. Prerequisite: Sophomore standing.

235. Plain Concrete. Production, properties, specification requirements and uses of Portland cement, aggregates, mixing water, and admixtures; proportioning; field practice in the production of concrete; laboratory practice including tests on materials and concrete of various proportions; calculations and graphs based on values from concrete proportioning projects. I, II; 2. Prerequisite: Sophomore standing in engineering, architecture, or landscape architecture.

Economics

100. Introduction to Business. An introductory course on the principles and practices of our economic system from the point of view of the business manager. Open to freshmen only. I, II; 3.

102. Principles of Economics. Principles of production, supply, demand, value, price, distribution. I, II; 3. Prerequisite: One year of university work.

103. Principles of Economics. Principles of economics as applied to exchange, money, banking, price changes, governmental finance, etc. I, II; 3. Prerequisite: Economics 102.

108. Elements of Economics. A brief presentation of price determination, international trade and exchange, money and banking, and public finance. For non-commerce students only. Not open to those who have had Economics 102 and 103. I, II; 3. Prerequisite: One year of university work.

136. Economic History of the United States. Main events and leading personalities in the economic development of the United States as seen in the westward movement, the growth of industry, agriculture,

commerce, finance, transportation, the trust movement, and labor, 1790 to the present. Open only to freshmen and sophomores. I, II; 3.

138. Introduction to the Economic History of Modern Europe. The evolution of the economic institutions of modern Europe in relation to the development of industry, commerce, transportation, and finance in the principal European nations. For freshmen and sophomores only. I, II; 3.

170. Elements of Statistics. Methods of collection—presentation and interpretation of quantitative economic data, averages, dispersion, index numbers, reliability of statistics, time series analysis, and simple correlation. I, II; 3. Prerequisite: Economics 102 or 108; sophomore standing.

Education

101. Nature of the Teaching Profession: An Orientation Course. This course is designed to help the student get answers to the questions: "What does education in its various branches have to offer?" and "What preparation in general education, subject matter fields, and professional education is required or desirable?" Through an extensive testing and counseling program this course is designed to help the student evaluate his potentialities and problems with reference to becoming a teacher. I, II; 2.

109. Educational Psychology. The basic undergraduate course in psychology of education for prospective teachers. Materials and principles from the various areas of psychology (mental hygiene, learning, etc.) are applied to the practical problems of teaching. I, II; 3. Prerequisite: Psychology 100.

Electrical Engineering

114. Wiring and Illumination. Fundamentals of commercial and industrial illumination and wiring practice. Open to architecture and architectural engineering students only. I, II; 3. Prerequisite: Sophomore standing or consent of instructor.

126. Electric Circuits and Fields. Study of units and relations in electric and magnetic circuits and fields. Basic concepts of circuit parameters. I, II; 4. Prerequisite: Physics 103; Mathematics 132; credit or registration in Physics 104 and Mathematics 142.

101. Introduction to Poetry. Understanding of poetry through the reading and discussion of representative poems. I, II; 3. Students with 95 or more credit hours receive only 2 hours credit. Note: Credit is not given for English 101, 102, and 103 in addition to English 121 and 122. This course, plus English 102 and 103, satisfies the humanities requirement in general education.

102. Introduction to Drama. Understanding of drama through the reading and discussion of representative plays. The reading list will include selections from Greek, Elizabethan, modern English, continental, and American drama. I, II; 3. Students with 95 or more credit hours receive only 2 hours credit. See note under English 101.

103. Introduction to Fiction. Understanding of fiction through the reading and discussion of representative short stories and novels. The reading list will include Jane Austen's *Pride and Prejudice*, Balzac's *Pere Goriot*, Dostoevski's *Crime and Punishment*, E. M. Forster's *A Passage to India*, and Hemingway's *A Farewell to Arms*. I, II; 3. Students with 95 or more credit hours receive only 2 hours credit. See note under English 101.

113. American Literature. Classic American authors before the Civil War: an introduction to Franklin, Poe, Emerson, Hawthorne, Melville, Whitman, and others. I, II; 3. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

114. American Literature. Classic American authors after the Civil War to the present: an introduction to Mark Twain, James, Dreiser, Hemingway, O'Neill, Frost, and others. I, I; 3. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

121. Chief English Writers Before 1800. *Canterbury Tales*, *Utopia*, two plays of Shakespeare, *Paradise Lost*, *Gulliver's Travels*, *Tom Jones*, *Rasselas*. Particularly recommended for students in professional and technical courses such as law, medicine, commerce, engineering, etc. Credit is not given for English 121 in addition to English 101, 102, and 103. This course, plus English 122 and 123, satisfies the humanities requirement in general education. I, II; 3. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

122. Chief English Writers of the Nineteenth Century. Wordsworth, Byron, Carlyle's *Past and Present*, Arnold's prose and poetry,

FitzGerald's *The Rubaiyat of Omar Khayaam*, readings from T. H. Huxley, Browning's poems, and one novel. Particularly recommended for students in professional and technical courses, such as law, medicine, commerce, engineering, etc. Credit is not given for English 122 in addition to English 101, 102, and 103. This course, plus English 121 and 123, satisfies the humanities requirement in general education. I, II; 3. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

123. Chief Modern English Writers. Conrad, Eliot, Joyce, Lawrence, Shaw, Yeats, and others. Credit is not given for English 123 in addition to English 101, 102, and 103. This course, together with English 121 and 122, satisfies the humanities requirement in general education. I, II; 3. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

131. Introduction to Shakespeare. I, II; 3. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

144. Contemporary Poetry. American poetry from Whitman to Sandburg, and English poetry from the pre-Raphaelites to Masefield. II; 3. Prerequisite: Six hours of English literature or junior standing.

French

101. Elementary Course. Grammar, pronunciation, reading of modern authors, composition, conversation. For students who have no credit in French. I. II; 4. Students with 95 or more credit hours receive only 3 hours credit. No credit for graduation is given for French 101 without French 102.

102. Elementary Course. Continuation of French 101. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: French 101 or one year of high school French.

103. Modern French. Rapid reading of modern authors, syntax, and composition. I, II; 4. Prerequisite: French 102 or two years of high school French.

104. Modern French. Continuation of French 103. I, II; 4. Prerequisite: French 103 or three years of high school French.

201. Introduction to French Literature. I; 3. Prerequisite: French 104 or four years of high school French.

202. Introduction to French Literature. II; 3. Prerequisite: French 104 or four years of high school French.

General Engineering

100. Engineering Lectures for Freshmen. Selected topics each week. Required of freshmen in the College of Engineering. I, II; no credit.

101. Elements of Drawing. Lettering; orthographic projection; working drawings; chart and diagram drawings; isometric and oblique drawing; freehand sketching; tracings; methods of reproducing drawings. I, II; 3. Prerequisite: Plane geometry.

102. Descriptive Geometry. Theory of projections; solution of theoretical and practical problems involving size, shape, and relative position of common geometrical magnitudes such as points, lines, planes, curved surfaces, and solids; intersections, developments, shades and shadows, perspective drawing. I, II; 3. Prerequisite: Plane and solid geometry.

104. Advanced Drawing. Review of orthographic projection and working drawings; isometric, oblique, perspective, chart and diagram, topographical, architectural and structural drawing. I, II; 3. Prerequisite: General Engineering 101 or substantial equivalent.

107. Architectural Projection. Instrumentation; lettering; projection; intersections; conventions; shades and shadows. I, II; 2. Prerequisite: Plane geometry.

108. Architectural Projections. Shades and shadows; oblique, isometric, and perspective drawings; developments. I, II; 2. Prerequisite: General Engineering 107.

111. Advanced Drafting. For civil engineers. I; 2. Prerequisite: General Engineering 101 and 102, or consent of instructor.

112. Advanced Drafting. For mechanical engineers. II; 2. Prerequisite: General Engineering 101 and 102, or consent of instructor.

203. Aircraft Drafting and Lofting. Aircraft terminology, control and reference surfaces and systems; sheet metal terminology and fabrication; drafting standards and types of drawings; drafting room manuals and standard handbooks; descriptive geometry applied to simple

layouts and details; aircraft fastenings; lofting—plane, tapered, and double curved surfaces, airfoils, intersections; practices and standards. I, II; 3. Prerequisite: General Engineering 101 or substantial equivalent.

210. Industrial Production Illustration. Mechanical and freehand drawings in axonometric, oblique, and perspective; shades and shadows; rendering of drawings with various media including some work with the airbrush; industrial production illustration. An approved elective in all engineering curricula. I, II; 3. Prerequisite: General Engineering 102, or 107 and 108.

212. Graphical Calculations. Use of various types of slide rules with special attention to the log-log scales; rectification of curves from laboratory data to devise empirical equations using various types of coordinate paper, construction and use of nomographs or aligning charts. For students in engineering; accepted as an approved elective in all engineering curricula. I, II; 1. Prerequisite: General Engineering 101 or equivalent; Mathematics 112, 114, and 122.

Geography

101. Elements of Geography. The geographic point of view; elements of physical landscape; planetary relations, weather, climate, climatic regions, landforms, natural resources. Geography 101 and 111 meet the general education requirement in physical science, and Geography 101 and 104 meet the general education requirement in social sciences, in the College of Liberal Arts and Sciences. Lectures, discussions, and quiz. I, II; 5. Students with 95 or more credit hours receive only 4 hours credit.

104. World Regional Geography. Survey of the geographic structure of the world; regional patterns of settlement and land utilization; man's occupancy of the world. I, II; 3. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: Geography 101 or consent of instructor.

105. Introductory Economic Geography. Man's utilization of the major economic resources of the world from the standpoint of geographic patterns. Primarily for commerce students but open to others except those having credit in Geography 106. I, II; 3. Students with 95 or more credit hours receive only 2 hours credit.

111. Introductory Meteorology. The atmosphere; its composition, functions, and behavior in the production of various weather types; air masses; application to present-day activities. Lectures and quiz. I, II; 3. Prerequisite: Geography 101 or consent of instructor.

123. Geography of Illinois. Detailed regional study of the state with special emphasis on the cultural relations of Illinois to the rest of the nation. II; 3. Prerequisite: Geography 101, 104, or 106, or consent of instructor.

Geology

101. Physical Geology. Materials, structures, surface features of the earth and processes which have produced them. Lectures, quiz, and laboratory. One-half day field trip required. Geology 101 and 102 meet the general education requirement in the physical sciences. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit.

102. Historical Geology. Evolution of the earth and its life. Lectures and laboratory. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Geology 101 or Division of General Studies 141.

131. Mineralogy. A systematic study of minerals and common rocks. Lecture and laboratory. I; 3. Prerequisite: One semester of college chemistry.

132. Mineralogy. Continuation of Geology 131. A systematic study of minerals and common rocks. Lecture and laboratory. II; 3. Prerequisite: Geology 131.

150. Geology for Engineers. I, II; 3. Prerequisite: Sophomore standing in the College of Engineering.

German

101. Elementary Course. Oral practice, reading, and grammar for beginners. Not open to students who have had high school credit in this language. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. No credit toward graduation is given for German 101 without German 102.

102. Elementary Course. Continuation of German 101. Oral practice, reading, and grammar. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: German 101 or one year of high school German.

103. Intermediate Course. Modern narrative prose. Oral practice and sight reading. I, II; 4. Prerequisite: German 102, or two years of high school German, or equivalent.

104. Intermediate Course. Continuation of German 103. Literary reading. Classical and modern narrative prose. Oral practice and sight reading. I, II; 4. Prerequisite: German 103, or three years of high school German, or equivalent.

113. Practice in Conversation. Oral practice for the development of elementary skill in conversation and the improvement of pronunciation. This course is supplementary to German 103 and 104. I, II; 2. Prerequisite: German 102 or two years of high school German; registration in German 103 or 104.

210. Masterpieces of German Literature. Introduction to German literature, in subjects, forms, and ideals. I, II; 3. Prerequisite: German 104, 144, two years of college German, or equivalent.

History

111. History of Modern Western Civilization to 1815. Europe from the age of the great discoveries to the close of the Napoleonic wars. I; 4. Students with 95 or more credit hours receive only 3 hours credit.

112. History of Western Civilization from 1815 to the Present. Development of European nationalism, liberalism, and imperialism; World War I and II; reconstruction. II; 4. Students with 95 or more credit hours receive only 3 hours credit.

131. History of England to 1688. A survey of the political and constitutional, social and economic, church and cultural, and imperial history of the British people from the beginning of English history through the revolution of 1688. I; 4. Students with 95 or more credit hours receive only 3 hours credit.

132. History of England, 1688 to the Present. A survey of the political and constitutional, social and economic, diplomatic and imperial, and cultural history of the British people from 1688 to the present. II; 4. Students with 95 or more credit hours receive only 3 hours credit.

151. History of the United States to 1865. Colonial foundations, the movement for independence, early years of the Republic. I; 3. Prerequisite: Sophomore standing.

152. History of the United States, 1865 to the Present. A century of national life and organization. I; 3. Prerequisite: Sophomore standing.

181. The Ancient World. Ancient empires and Greece. I; 3. Prerequisite: Sophomore standing.

182. The Ancient World. Rome. II; 3. Prerequisite: Sophomore standing.

Humanities

101. Values in Literature. A general education course designed to guide the student to an understanding and appreciation of values in literature, and the relationship between recent literature and the classics. Assigned works are selected to illustrate and clarify problems in literary appreciation. Literary types studied include poetry, fiction, drama, and the film. Credit is not given for Humanities 101 in addition to English 101, 102, or 103. This course, plus Humanities 102, satisfies the general education requirement in the humanities. I; 4.

102. Values in Literature. A general education course designed to guide the student to an understanding and appreciation of values in literature and the classics. Assigned works are selected to illustrate and clarify problems in literary appreciation. Literary types studied include poetry, fiction, drama, and the film. Credit is not given for Humanities 102 in addition to English 101, 102, or 103. This course, plus Humanities 101, satisfies the general education requirement in the humanities. II; 4. Prerequisite: Humanities 101.

151. The Heritage of Western Culture. A study of literary masterpieces representing significant contributions to the thinking of the

Western World on topics of man's fate and his personal adjustment to life. Credit is not given for Humanities 151 in addition to English 101, 102, or 103. This course, plus Humanities 152, satisfies the general education requirement in the humanities. I; 4. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

152. The Heritage of Western Culture. A study of literary masterpieces representing significant contributions to the thinking of the Western World in relation to the state and society. Credit is not given for Humanities 152 in addition to English 101, 102, or 103. This course, plus Humanities 151, satisfies the general education requirement in the humanities. II; 4. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

Hygiene

101. Personal and Environmental Hygiene. This course or Hygiene 104 is required of all undergraduate men and women during their first year of residence. I, II; 2. Students with 95 or more credit hours receive only 1 hour credit. Students who expect to take Hygeine 110 should fulfill the undergraduate hygiene requirement by taking Hygiene 104 instead of Hygiene 101.

104. Personal and Community Health. This course or Hygiene 101 is required of all undergraduate men and women during their first year of residence. I, II; 2. Students with 95 or more credit hours receive only 1 hour credit. Students who expect to take Hygiene 110 should take Hygiene 104 (the prerequisite). Hygiene 104 is a more comprehensive course than Hygiene 101 for those interested in a more intensive study of personal and community hygiene. It is especially designed for teachers, coaches, social workers, and others who feel they will need this course in their future professional work.

110. Public Health. Material presented deals with information about community public health problems and the programs designed to prevent disease and promote health education. This is especially valuable for all people who go into health professions or related community work. Field trips and surveys supplement class work. Teachers, coaches, social workers will need this course in their future professional work. I, II; 2. Students with 95 or more credit hours receive only 1 hour credit. Prerequisite: Hygiene 104.

Management

101. Industrial Organization and Management. Organization plans, administrative policies, and management problems with special attention to manufacturing units. I, II; 3. Prerequisite: Economics 102, or 108, or consent of Associate Dean of the college; forty-five credit hours.

Marketing

101. Principles of Marketing. The functions, commodities, and middlemen involved in the marketing of goods and services; the policies and problems involved in the operation of market institutions. I, II; 3. Prerequisite: Economics 102, or 108, or consent of Associate Dean of the college; forty-five credit hours.

Mathematics

101. Basic Mathematics. A systematic presentation of the fundamentals of arithmetic, algebra, plane geometry, trigonometry, and statistics. For Liberal Arts and Science students only. Required of students in the general curriculum of the College of Liberal Arts and Sciences whose entrance credits do not include one year of algebra and one year of plane geometry. II; 3.

102. Basic Mathematics. Continuation of Mathematics 101. I; 3. Prerequisite: Mathematics 101.

103. Introduction to College Algebra. I, II; 3. Students having 1½ entrance units in algebra receive no credit. Students with 95 or more credit hours receive no credit.

104. Elements of Algebra and Trigonometry. For premedical students who have entered with only one unit of high school algebra, and who need credit in trigonometry as a prerequisite to physics. This course does not serve as a prerequisite for Mathematics 122. Premedical students who enter with 1½ units of algebra must take Mathematics 114. I, II; 3. Prerequisite: High school algebra, 1 unit; plane geometry, 1 unit.

106. Solid Geometry. Satisfies deficiency in solid geometry for engineering students; all other students receive full credit. I, II; 3. Prerequisite: Entrance algebra, 1 unit; plane geometry, 1 unit.

108. Elementary Plane Geometry for Veterans. This course deals with the usual topics of high school geometry. It is designed as a refresher course for veterans who are deficient in this area of basic mathematics. Students may meet entrance requirements for the Colleges of Commerce and Engineering through this course. I, II; no credit.

109. Fundamentals of Mathematics. For students who do not specialize in mathematics. A survey of the character of mathematics as a subject and of its relations to science, art, philosophy, and knowledge in general. Mathematics 109 and 110 meet the physical science requirement in general education in Liberal Arts and Sciences. I, II; 4. Prerequisite: Consent of the department.

110. Fundamentals of Mathematics. For students who do not specialize in mathematics. A survey of the character of mathematics as a subject and of its relations to science, art, philosophy, and knowledge in general. Mathematics 109 and 110 meet the physical science requirement in general education in Liberal Arts and Sciences. II; 4. Prerequisite: Mathematics 109.

112. College Algebra. I, II; 3. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: Entrance algebra, 1½ units, or Mathematics 103; plane geometry, 1 unit, or Mathematics 108.

114. Plane Trigonometry. I, II; 2. Students with 95 or more credit hours receive only 1 hour credit. Prerequisite: Entrance algebra, 1½ units, or Mathematics 103; plane geometry, 1 unit, or Mathematics 108.

117. Combined Freshman Mathematics. A combined course integrating all the usual topics of algebra, trigonometry, and analytic geometry, and also some topics of differential calculus. For students of chemistry, chemical engineering, ceramic engineering, ceramics, and architecture. I; 5. Prerequisite: Entrance algebra, 1½ units; plane geometry, 1 unit.

122. Analytic Geometry. Plane and solid analytic geometry. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Mathematics 111 or 112, and 114 or 115.

123. Analytic Geometry. Plane and solid analytic geometry. I, II; 5. Students with 95 or more credit hours receive only 4 hours credit. Prerequisite: Mathematics 111 or 112, and 114 or 115.

127. Combined Freshman Mathematics. Continuation of Mathematics 117. I, II; 4. Prerequisite: Mathematics 117.

132. Calculus. First course for students of mathematics and engineering. I, II; 5. Prerequisite: Mathematics 122.

133. Calculus. First course for students of mathematics and engineering. I, II; 3. Prerequisite: Mathematics 122 or 123.

137. Calculus. For students of chemistry, chemical engineering, ceramics, ceramic engineering, and architecture. I; 3. Prerequisite: Mathematics 117 and 127, or consent of department.

142. Calculus. Second course for students of mathematics and engineering. I, II; 3. Prerequisite: Mathematics 132.

143. Calculus. Second course for students of mathematics and engineering. I, II; 5. Prerequisite: Mathematics 133.

147. Calculus. Continuation of Mathematics 137. II; 3. Prerequisite: Mathematics 137.

161. Statistics. II; 3. Prerequisite: Mathematics 111 or 112; sophomore standing.

341. Differential Equations. II, 3. Prerequisite: Mathematics 132 and 142, or 137 and 147.

Mechanical Engineering

171. Mechanism. A study of the transmission and modification of motion by linkwork, cams, gears, belts, ropes, chains, etc.; theory of gear tooth action; gear tooth systems and production methods; point paths, displacement diagrams. I, II; 2. Prerequisite: General Engineering 101; registration in Physics 103.

182. Manufacturing Processes. Foundry practice; pattern design; hot and cold forming. Welding and allied processes; machine tools and machining practice; use of jigs, fixtures, and tools for manufacture of interchangeable parts. Classroom discussion and demonstrations. I, II; 3. Prerequisite: Sophomore standing in aeronautical engineering or consent of instructor.

183. Materials Casting. Casting as a process of fabrication; the molding process including machine moulding; molding sands characteristics, control, and testing. Melting and pouring practice. Physical characteristics of cast materials, advantages and disadvantages; tray iron structures and elementary metallurgical concepts; design of wood and metal patterns and correlation with foundry practice; core requirements control and testing. I, II; 3. Prerequisite: General Engineering 101 or 104; sophomore standing.

184. Metal Processing. Basic machining processes used for metal processing. Use of machine tools, jigs, fixtures, gages, and measuring instruments and inspection methods to produce interchangeable metal parts. I, II; 3. Prerequisite: General Engineering 101 or 104; sophomore standing.

209. Thermodynamics and Heat Transfer. Thermodynamic analysis of energy transfer and transformation. Properties of simple working substances. Analysis of open and closed systems, direct and reverse cycles, and processes involving transfers of mass and energy. Basic laws of heat transfer. I, II; 3. Prerequisite: Physics 108; Mathematics 142 or 143.

Military Science and Tactics

101. Freshman Basic Drill and Theory. Basic military instruction to include military policy, military organization, evolution of warfare, maps, and leadership, drill, and command. I; 1. Prerequisite: Approval of department.

102. Freshman Basic Drill and Theory. Basic military instruction to include military psychology and personnel management, geographical foundations of national power, military problems of the United States, and leadership, drill, and command. II; 1. Prerequisite: Military Science 101 or equivalent.

103. Sophomore Basic Drill and Theory. Basic infantry instruction to include leadership, drill, and exercise of command, organization of infantry units, weapons, marksmanship, technique of fire of rifle squad, combat formation, scouting and patrolling, tactics of rifle squad. I; 1. Prerequisite: Military Science 102 or equivalent.

104. Sophomore Basic Drill and Theory. Continuation of Military Science 103. II; 1. Prerequisite: Military Science 103 or equivalent.

205. Infantry Junior Drill and Theory. Advanced instruction in infantry to include leadership, drill and exercise of command, organization, weapons, gunnery, communications, combat intelligence, estimate of situation and combat orders, field fortifications, and tactics of rifle and heavy weapons platoon and companies. I; 3. Prerequisite: Military Science 104 or equivalent approved by head of department and institution.

Philosophy

101. Introduction to Philosophy. Discussion of problems in the field of morals, art, and knowledge, with selected readings from philosophers whose views have been influential in Western culture. I, II; 3. Prerequisite: Sophomore standing.

102. Logic. Reasoning, detection of fallacies, evidence. I, II; 3. Prerequisite: Sophomore standing.

105. Moral Ideas and Practice. I, II; 2. Credit is not given for both Philosophy 103 and 105. Prerequisite: Sophomore standing.

Physical Education for Men

101. Prescribed Exercise. Prescribed ameliorative exercises adapted to individual needs, capacities, and interests. I, II; 1.

102. Prescribed Exercise. Prescribed ameliorative exercises adapted to individual needs, capacities, and interests. I, II; 1.

103. Prescribed Exercise. Prescribed ameliorative exercises adapted to individual needs, capacities, and interests. I, II; 1.

104. Prescribed Exercise. Prescribed ameliorative exercises adapted to individual needs, capacities, and interests. I, II; 1

106. Developmental Activities. Activities that contribute to the development and maintenance of physical fitness according to social and hygienic standards. I, II; 1.

107. Beginning Swimming. Skills, knowledge, attitudes, and conditions. I, II; 1. Open to non-swimmers.

109. Advanced Swimming. Skills, knowledge, attitudes, and conditions. I, II; 1. Prerequisite: Ability to swim 100 yards.

112. Individual Tumbling Stunts. Skills, knowledge, attitudes, and conditions. I, II; 1.

113. Double Tumbling Stunts. Skills, knowledge, attitudes, and conditions. I, II; 1.

114. Apparatus Stunts. Skills, knowledge, attitudes, and conditions. I, II; 1.

117. Boxing. Skills, knowledge, attitudes, and conditions. I, II; 1.

118. Wrestling. Skills, knowledge, attitudes, and conditions. I, II; 1.

120. Personal Defense Activities. Skills, knowledge, attitudes, and conditions. I, II; 1.

123. Weight Lifting. Skills, knowledge, attitudes, and conditions. I, II; 1.

129. Volleyball. Skills, knowledge, attitudes, and conditions. I, II; 1.

130. Basketball. Skills, knowledge, attitudes, and conditions. I, II; 1.

132. Archery. Skills, knowledge, attitudes, and conditions. I, II; 1.

136. Badminton. Skills, knowledge, attitudes, and conditions. I, II; 1.

139. Backyard Sports. Skills, knowledge, and conditions. I, II; 1.

140. Boating and Fishing. I, II; 1. Prerequisite: Two hours of credit in physical education and a score on the physical fitness test that allows the student a free choice of activities or approval of the Director of Physical Education.

143. American Square Dance. I, II; 1.

150. Professional Orientation. Introduction to the fields of physical education, athletics, health, safety, recreation. For physical education majors. I, II; 2.

151. Beginning Basketball. Introductory skills, rules, and strategy. For physical education majors. I, II; 2.

152. Beginning Football. Introductory skills, rules, and strategy. For physical education majors. I, II; 2.

153. Physical Conditioning Program. Physical fitness tests; calisthenics, medicine ball, bulldozer, grass, all-out and locomotor exercises; leadership techniques. For physical education majors. I, II; 2.

155. Gymnastics. Tumbling and apparatus stunts. I, II; 2.

156. Track and Field. Track events and field events; rules. I, II; 2.

Recreation

170. Outdoor Recreational Sports. Soccer, touch football, volleyball, softball, speedball. I, II; 2.

171. Indoor Recreational Sports. Badminton, handball, paddle tennis, squash racquets, table tennis, weight lifting. I, II; 2.

174. Camp Counseling. Objectives, administration, techniques, activity programs, evaluation. I, II; 3.

176. Principles of Recreation. History of leisure and recreation; concepts of play and recreation; major recreation agencies. I, II; 3.

Physical Education for Women

100. Conditioning Activities. I, II; 1.

101. Individual Gymnastics. Recommendation from the Department of Health Service is necessary for registration in this course. I, II; 1.

102. Modified Activities. Prescribed recreational sports, relaxation, and exercise. I, II; 1, Prerequisite: Recommendation from the Department of Health Service.

105. Elementary Rhythms. I, II; 1.

106. Intermediate Rhythms. I, II; 1. Prerequisite: Physical Education for Women 105 or consent of instructor.

107. Advanced Rhythms. An opportunity for those who have completed previous work to further their skills in muscular control and extend

their creative interests and appreciations of art through the medium of the dance. I, II; 1. Prerequisite: Phyiscal Education for Women 105 and 106, or consent of instructor.

110. Elementary Swimming. S; 1.

123. Basketball. I, II; 1.

124. Volleyball. I, II; 1.

125. Softball. I, II; 1.

130. Badminton. I, II; 1.

131. Golf. Personal equipment to be furnished by student. I, II; 1.

132. Bowling. S; 1.

135. Archery. I, II; 1.

140. Boating and Fishing. Open to students who have completed two semesters of physical education. I, II; 1.

141. Tumbling and Apparatus Stunts. The side horse, parallel bars, stall bars, buck, etc., are used to develop skills in balance and co-ordination on apparatus. Attention is directed toward safety factors necessary in utilizing this equipment. Forward rolls, backward rolls, group and individual stunts are used. I, II; 1.

143. American Square Dance. I, II; 1.

144. Elementary Folk Dance. I, II; 1.

Physical Science

101. Introduction to the Physical Sciences. A course designed to meet the general education requirements in physical science. The more important principles of physics, chemistry, geology, and other branches of physical science are introduced and co-ordinated in order to give the non-science student an understanding and appreciation of the field. Credit will not be given for both Physical Science 101-102 and

Division of General Studies 141-142. Credit will not be allowed to a student who has credit in general chemistry, physics, or geology. I, II; 4. Prerequisite: Two units of high school mathematics or consent of the department.

102. Introduction to the Physical Sciences. A continuation of Physical Science 101. Credit will not be given for both Physical Science 101-102 and Division of General Studies 141-142. Credit will not be allowed to a student who has credit in general chemistry, physics, or geology. I, II; 4. Prerequisite: Physical Science 101.

Physics

101. General Physics (Mechanics, Sound, and Heat). Lectures with demonstrations, recitations, and laboratory. For students in arts and sciences, and architecture. I, II; 5. Prerequisite: Mathematics 114 or 117.

102. General Physics (Light, Electricity, and Magnetism). Lectures with demonstrations, recitations, and laboratory. For students in arts and sciences, and architecture. I, II; 5. Prerequisite: Physics 101.

105. Nurses' Physics. Primarily for students in nursing education. Those basic principles of physics that are pertinent to the training and routine of nurses in both institutional and private service. A lecture and problem course with emphasis on selected recent developments in nuclear physics and radioactive tracers. Lecture-demonstrations and quiz. I, II; 4. Prerequisite: Sophomore standing or consent of instructor.

106. General Physics (Mechanics). Lectures with demonstrations, recitations, and laboratory. For students in engineering, mathematics, physics, and chemistry. I, II; 4. Prerequisite: Credit or registration in Mathematics 133.

107. General Physics (Electricity, Magnetism, and Modern Physics). Lectures with demonstrations, recitations, and laboratory. For students in engineering, mathematics, physics, and chemistry. I; 4. Prerequisite: Physics 106; credit or registration in Mathematics 143.

108. General Physics (Heat, Sound, Light, and Modern Physics). Lectures with demonstrations, recitations, and laboratory. For stu-

dents in engineering, mathematics, physics, and chemistry. II; 4. Prerequisite: Physics 106; credit or registration in Mathematics 143.

341. Electricity and Magnetism. Lectures, problems, and laboratory. This course is fundamental to advanced courses and should be elected as early as possible by those intending to specialize in physics. Fundamental laws logically developed and summarized in Maxwell's equations. Forces and energies associated with electric and magnetic properties of matter. Generation and propagation of electromagnetic waves. I; 4. Prerequisite: General physics and calculus.

Political Science

103. Introduction to Political Science. A course designed to acquaint the student with basic concepts of political science. Topics to be covered will include the following: scope and method of political science; constitutions and forms of government; nature and problems of democracy; the making, control, and execution of public policy. I; 3.

104. Introduction to International Politics. This is designed as a survey course. Topics to be covered will include the following: the development of the world system of states; the international political and economic struggle for power; the determination and conduct of foreign policy; problems involved in maintaining peace, and organizations devoted to its maintenance. II; 3.

150. American Government: Organization and Powers. Historical development and organization of national, state, and local governments; the federal system; national and state constitutions; civil and political rights; party system; nature, structure, powers, and procedure of legislative, executive, and judicial departments in state and nation. I, II; 3. Prerequisite: Sophomore standing.

151. American Government: Functions. Functions of national, state, and local governments; foreign relations and national defense; taxation and finance; law enforcement; police power; regulation of commerce, communications, and business; promotion of social and economic welfare; current problems. I, II; 3. Students may not receive credit for both Political Science 151 and 101 and 102. Prerequisite: Sophomore standing; Political Science 150 or consent of the department.

100. Introduction to Psychology. Introductory analysis and description of human behavior with special reference to observation, learning, memory, thinking, emotional life, and personality development. Major emphasis is placed upon psychological principles as they relate to daily life and everyday problems. I, II; 4. Prerequisite: Second semester freshman standing.

125. An Introduction to the Fields of Psychology. An introduction to the basic fields of psychology including the history of psychology, developmental psychology with an emphasis on the socialization of the child, individual differences, industrial, social, abnormal, and physiological psychology. I; 4. Students taking this course may not take Psychology 220 at the Urbana campus for credit. Prerequisite: Psychology 100, or equivalent, or junior standing.

135. Statistical Methods in Psychology. Application of elementary statistical methods to psychological data. No credit for this course will be given to students who receive credit for Economics 170 or Mathematics 161. I, II; 3. Prerequisite: Psychology 100, 103, or 106.

145. Industrial Psychology. A consideration of socio-psychological principles of behavior in business and industry and of the scientific methods of investigation in this area, and a survey of specific methods of personnel technology. II; 3. Prerequisite: Psychology 100.

150. Personality and Human Relations. An introduction to the study of personality in relationship to the social environment. Application of psychological principles to social problems. II; 3. Prerequisite: Psychology 100 or equivalent.

Rhetoric

100. Freshman Remedial Rhetoric and Composition. Open to students who fail the placement test for admission to Rhetoric 101. Intensive review of fundamentals, with considerable practice in composition. Students passing this course will be admitted to Rheotric 101 without further examination. I, II; no credit.

101. Freshman Rhetoric and Composition. This course provides elementary training and practice in the comprehension and expression of written and oral English. I, II; 3. Students with 95 or more

credit hours receive only 2 hours credit. Prerequisite: A passing grade on the placement examination or a passing grade in Rhetoric 100.

102. Freshman Rhetoric and Composition. This course provides elementary training and practice in the comprehension and expression of written and oral English. I, II; 3. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: Rhetoric 101.

133. Expository Writing. I; 3. Prerequisite: Rhetoric 101 and 102. sophomore standing.

144. Narrative Writing. Practice in description, narrative sketches, stories. II; 3. Prerequisite: Rhetoric 101 and 102; sophomore standing.

151. Business Letter Writing. I, II; 3. Prerequisite: Rhetoric 102. This course is not counted toward a major in English.

Social Sciences

111. The Individual in Society. A general education course designed to equip the beginning student with an understanding of the nature and the role of the individual as a member of the several groupings of his social community. I, II; 4. Credit is not given for this course to a student with credit, or concurrent registration, in a course in anthropology, psychology, or sociology. Students with 95 or more credit hours receive only 3 hours credit.

112. Bases of American Life. A general education course designed to acquaint the student with the physical, economic, political, and social developments of the United States and to equip him for intelligent active participation in local and national life. I, II; 4. Credit is not given for this course to a student with credit, or concurrent registration, in Political Science 150 or 151 or History 151 or 152. Students with 95 or more credit hours receive only 3 hours credit.

113. World Patterns and World Problems. A general education course designed to bring the student to an understanding of the geographic, economic, and political bases of the present world situation. I, II; 4. Credit is not given for this course to a student with credit, or con-

current registration, in Geography 103. Students with 95 or more credit hours receive only 3 hours credit.

114. The Unity of Knowledge. A general education course designed to acquaint the student with the development of philosophical and scientific disciplines in intellectual history, and to equip him to direct his further general education by his awareness of the integrative factors in current education and culture. I, II; 4. Prerequisite: Sophomore standing and a 3.5 average.

116. Family Living. The development of the family from early to modern times. The factors involved in the establishment and maintenance of a family. Opportunities for individual counseling. I, II; 4. Prerequisite: Sophomore standing or consent of instructor.

Sociology and Anthropology

Sociology

100. Introduction to Sociology. Introductory analysis and description of the structure of dynamics of human society. Special emphasis is placed on the application of scientific methods to the observation and analysis of social norms, groups, intergroup relations, social change, social stratification, and institutions. I, II; 3. Prerequisite: Sophomore standing.

130. Society and Individual Development. Nature of person and relation to institutions, social order, and development. I, II; 3. Prerequisite: Sociology 100.

140. Social Control. The methods and techniques of group social control of individuals in small groups, societies, and large publics. The innovations in methods of social control resulting from the development of the new mass media of communication. I, II; 3. Prerequisite: Sociology 100, or 104 and 105, or Division of General Studies 151 and 152.

Anthropology

102. Introduction to Anthropology: The Origin of Man and Culture. An introduction to and general survey of human origins and early man, physical anthropology, race and racism, linguistics, archaeology

and the beginning of human civilization. Recommended though not required to be taken with Anthropology 103 as a survey of the field of anthropology. I, II; 3.

103. Introduction to Anthropology: The Growth of Culture. An introduction to and survey of the development of cultures with special attention to invention, diffusion, adaptation, integration, and other processes of cultural growth as illustrated by primitive and native populations of the world. Recommended though not required to be taken with Anthropology 102 as a survey of the field of anthropology. I, II; 3.

Spanish

101. Elementary Spanish. For students who have no credit in Spanish. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. No credit toward graduation is given for Spanish 101 without 102.

102. Elementary Spanish. Continuation of Spanish 101. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Spanish 101 or one year of high school Spanish.

103. Intermediate Spanish. Rapid reading, review of grammar, composition, conversation. I, II; 4. Prerequisite: Spanish 102 or two years of high school Spanish.

104. Intermediate Spanish. Continuation of Spanish 103. I, II; 4. Prerequisite: Spanish 103 or three years of high school Spanish.

113. Elementary Composition and Conversation. Conducted largely in Spanish. May be taken concurrently with Spanish 103. Does not count toward the major in Spanish. I, II; 2. Prerequisite: Spanish 102 or two years of high school Spanish.

201. Introduction to Spanish Literature. Reading of modern authors of Spain and Spanish America. I; 3. Prerequisite: Spanish 104 or four years of high school Spanish.

202. Introduction to Spanish Literature. Reading of modern authors of Spain and Spanish America. II; 3. Prerequisite: Spanish 201 or consent of instructor.

101. Principles of Effective Speaking. Preparation and presentation of short informative and persuasive speeches, with emphasis on the selection and organization of material, methods of securing interest and attention, and the elements of delivery. I, II; 3. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: A passing grade in Rhetoric 101 placement examination or a passing grade in Rhetoric 100.

105. Voice and Articulation. A drill course for the improvement of the normal speaking voice. II; 2. Students with 95 or more credit hours receive only 1 hour credit.

107. Parliamentary Procedure. Principles and practice of parliamentary procedure. I, II; 2. Students with 95 or more credit hours receive only 1 hour credit.

111. Business and Professional Speaking. Study, preparation, and presentation of the chief types of business speeches, with special attention to conferences, sales talks, interviews, job applications. I, II; 2. Prerequisite: Speech 101; sophomore standing.

117. Argumentation. Methods of logical analysis; the kinds and forms of argument; the adaptation of argumentative materials to audience situations; and the forms of debate. Practice debates on current subjects. I, II; 3. Prerequisite: Speech 101; sophomore standing.

141. Oral Interpretation of Literature. Principles of interpretations, analysis, and oral reading of prose literature and verse. I, II; 2. Students with 95 or more credit hours receive only 1 hour credit.

161. Fundamentals of Acting. A study of the methods of acting, with emphasis given to basic stage techniques. The role of the character in relation to the play as a whole; the intellectual and emotional values of the play and their interpretation by means of voice and acting. I, II; 3. Prerequisite: Speech 141.

164. Radio Speaking. Preparation and presentation of the chief types of radio speeches, and of the interview, round table, and discussion. Microphone experience. I, II; 2. Prerequisite: Consent of instructor.

Theoretical and Applied Mechanics

150. Analytical Mechanics (Statics). Resultants of force systems, algebraic and graphical condition of equilibrium of force systems. Analy-

sis of forces acting on members of trusses, frames, etc. Forces due to friction. Centroids. I, II; 2. Prerequisite: Registration in Mathematics 142.

154. Analytical Mechanics (Statics and Dynamics). A combination of Theoretical and Applied Mechanics 150 and 211 with less emphasis on some topics. For electrical engineering students only. I, II; 4. Prerequisite: Registration in Mathematics 142.

156. Analytical Mechanics (Statics and Dynamics). A combination of Theoretical and Applied Mechanics 150 and 211. I, II; 5. Prerequisite: Registration in Mathematics 142.

171. Elements of Mechanics (Statics). Resultants and equilibrium of force systems; conditions of equilibrium applied to trusses, frames, etc.; forces due to friction; centroids; stress and deformation in direct tension and compression; riveted and welded joints; properties of materials. For architects only. I, II; 3. Prerequisite: Mathematics 122.

172. Strength of Materials. Relationships between external forces acting on beams and the stresses produced; shear, moment, slope and deflection diagrams; moment of inertia; columns. For architects only. I, II; 3. Prerequisite: Theoretical and Applied Mechanics 171.

211. Analytical Mechanics (Dynamics). Displacement, velocity, and acceleration of a particle; relation between forces acting on rigid bodies and the changes in motion produced; translation; rotation; plane motion; solutions using the principles of force, mass, and acceleration, work and energy, and impulse and momentum. I, II; 3. Prerequisite: Theoretical and Applied Mechanics 150.

221. Resistance of Materials. Relationships between external forces acting on elastic bodies and the stresses and deformations produced; tension and compression members; members subjected to torsion and to bending; columns; combined stresses; properties of materials. I, II; 3. Prerequisite: Theoretical and Applied Mechanics 150, 154, or 156.

223. Resistance of Materials Laboratory. Tests of steel, cast iron, aluminum alloys, concrete, and wood; determination of such mechanical properties as strength, hardness, ductility, energy, resistance, engineering significance of mechanical properties. I, II; 1. Prerequisite: Registration in Theoretical and Applied Mechanics 221.

Calendar

CHICAGO UNDERGRADUATE DIVISION

1955—FIRST SEMESTER

Tues., Sept. 6—Wed., Sept. 14 ..... Orientation Period
Thurs. Sept. 15—Sat., Sept. 17 ..... Registration
Mon., Sept. 19 ..... Instruction Begins
Wed., Nov. 23, 6 p.m. ..... Thanksgiving Vacation Begins
Mon. Nov. 28, 8 a.m. ..... Thanksgiving Vacation Ends
Sat., Dec. 3 ..... Illinois Day (State admitted to the Union 1818)
Fri., Dec. 16, 6 p.m. ..... Christmas Vacation Begins
Tues., Jan. 3, 8 a.m. ..... Christmas Vacation Ends
Fri., Jan. 20—Sat., Jan. 28 ..... Semester Examinations

1956—SECOND SEMESTER

Sat., Feb. 4—Wed., Feb. 8 ..... Orientation Period
Thurs., Feb. 9—Sat., Feb. 11 ..... Registration
Mon, Feb. 13 ..... Instruction Begins
Fri., Mar. 2 ..... University Day (University opened 1868)
Thurs., Mar. 29, 6 p.m. ..... Easter Vacation Begins
Wed., Apr. 4, 8 a.m. ..... Easter Vacation Ends
Fri., Apr. 27 ..... Honors Day
Wed. May 30 (Holiday) ..... Memorial Day
Mon. June 4—Tues. June 12 ..... Semester Examinations

SUMMER SESSION 1956

Fri., June 22—Sat., June 23 ..... Registration
Mon., June 25 ..... Instruction Begins
Wed., July 4 (Holiday) ..... Independence Day
Tues., Aug. 17—Wed., Aug. 18 ..... Summer Session Examinations

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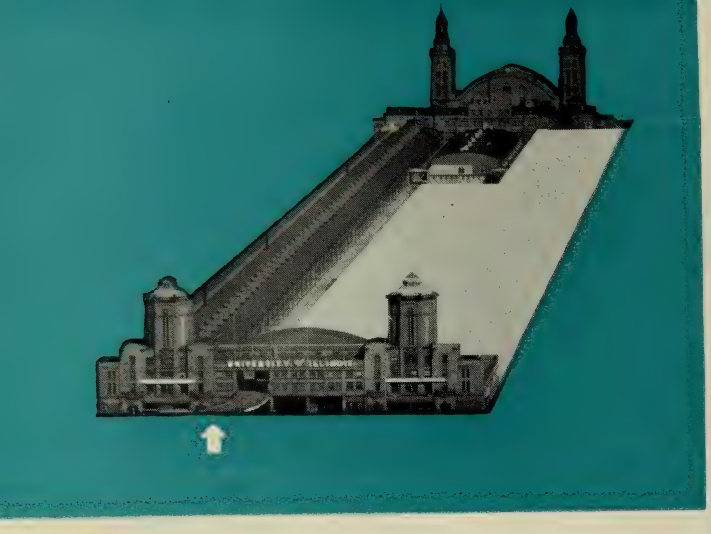

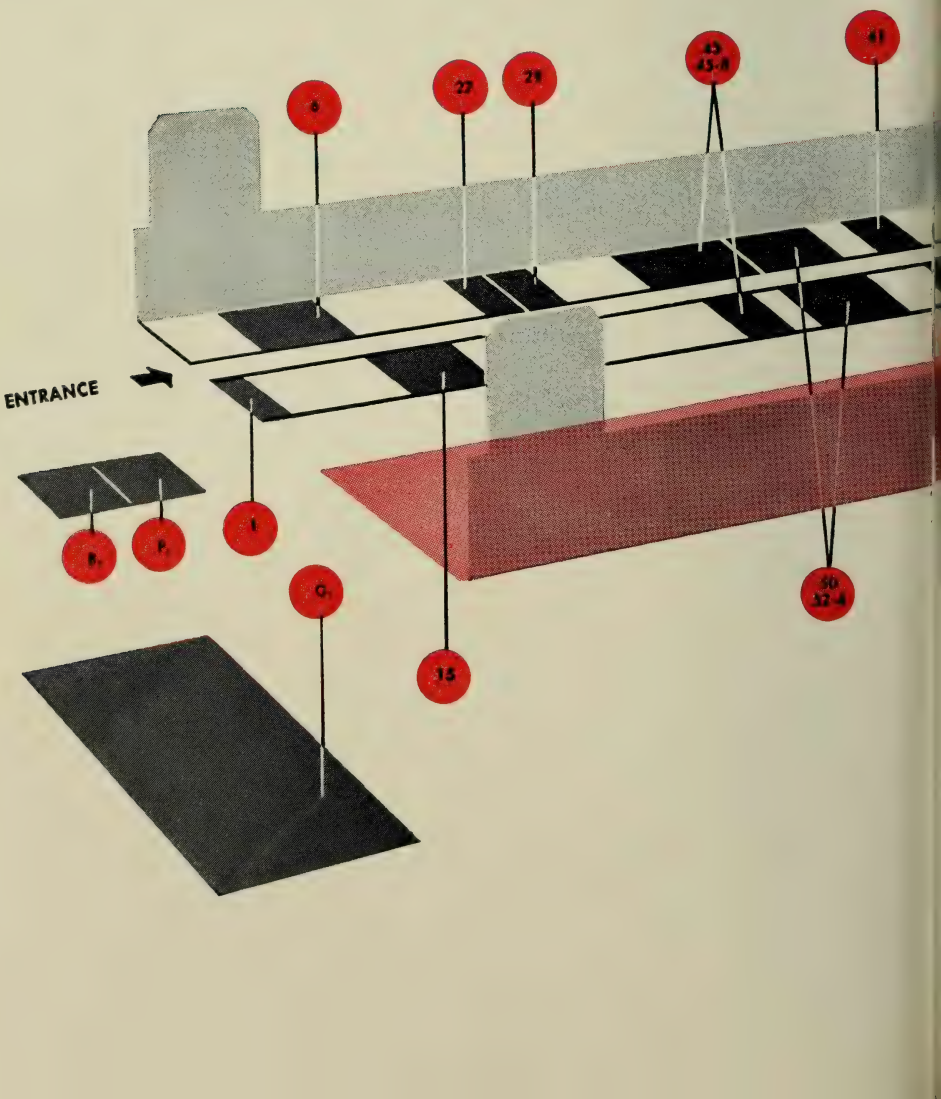
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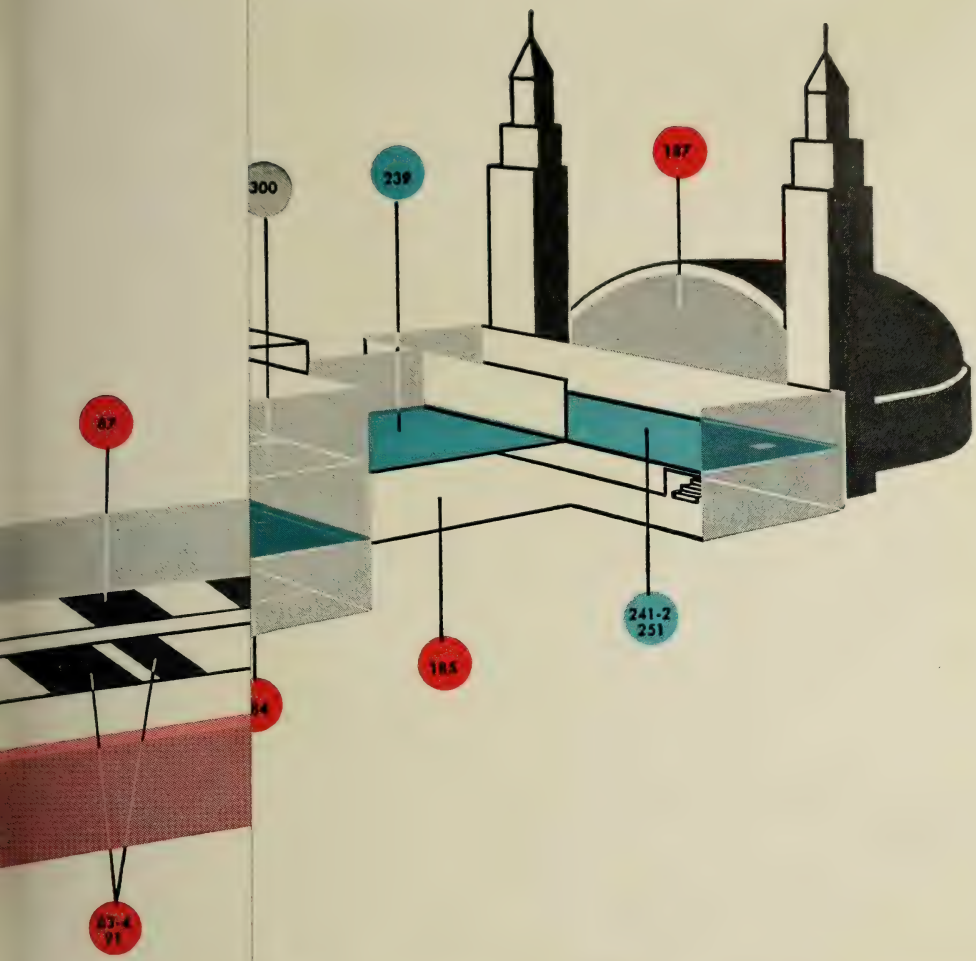

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P. 185 STUDENT CAFETERIA

G. 187 AUDITORIUM AND WOMEN'S GYM

I 101-20 LECTURE ROOMS AND CLASSROOMS

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312 LOUNGE

313 DEAN OF STUDENTS, DEAN OF MEN, DEAN OF WOMEN

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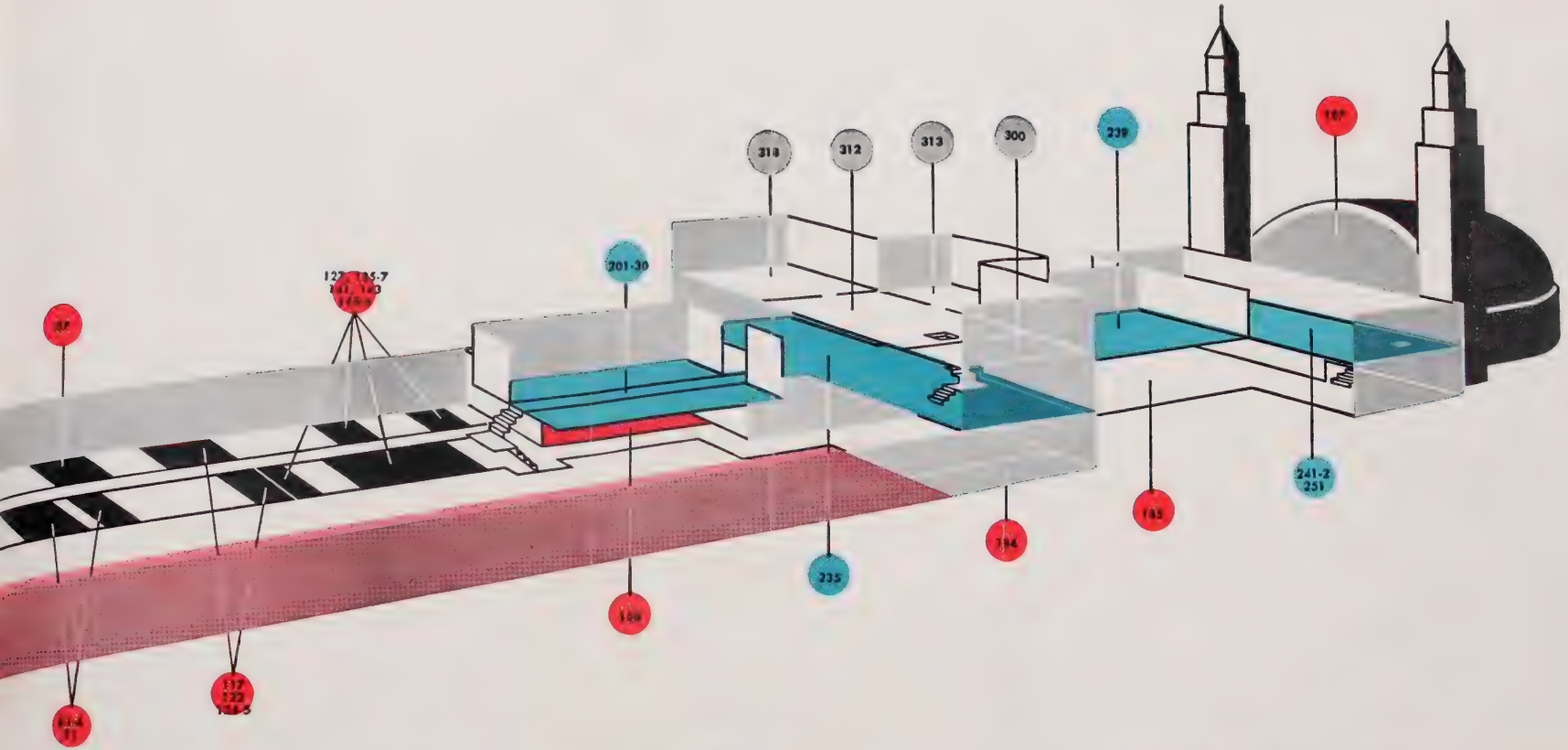

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- POLICE HEADQUARTERS
- MEN'S GYM
- INFORMATION DESK
- SNACK BAR AND LOUNGE
- ADMISSIONS AND RECORDS OFFICE
- ASSOC. DEAN OF COMMERCE
- ASSOC. DEAN OF L. A. & S.
- BIOLOGICAL SCIENCES LABORATORIES
- CHEMISTRY LABORATORIES
- CONCRETE TESTING LABORATORY
- MACHINE SHOP
- WELDING LABORATORY, FOUNDRY, SAND TESTING LABORATORY
- ART ROOMS
- BOOKSTORE
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- GENERAL ENGINEERING DRAWING
- PHYSICAL PLANT
- ASSOC. DEAN OF ENGINEERING
- STUDENT CAFETERIA
- AUDITORIUM AND WOMEN'S GYM
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- LOUNGE
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- 300 STUDENT COUNSELING BUREAU
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UNIVERSITY OF ILLINOIS

Chicago Undergraduate Division

Chicago Professional Colleges

TRANSPORTATION

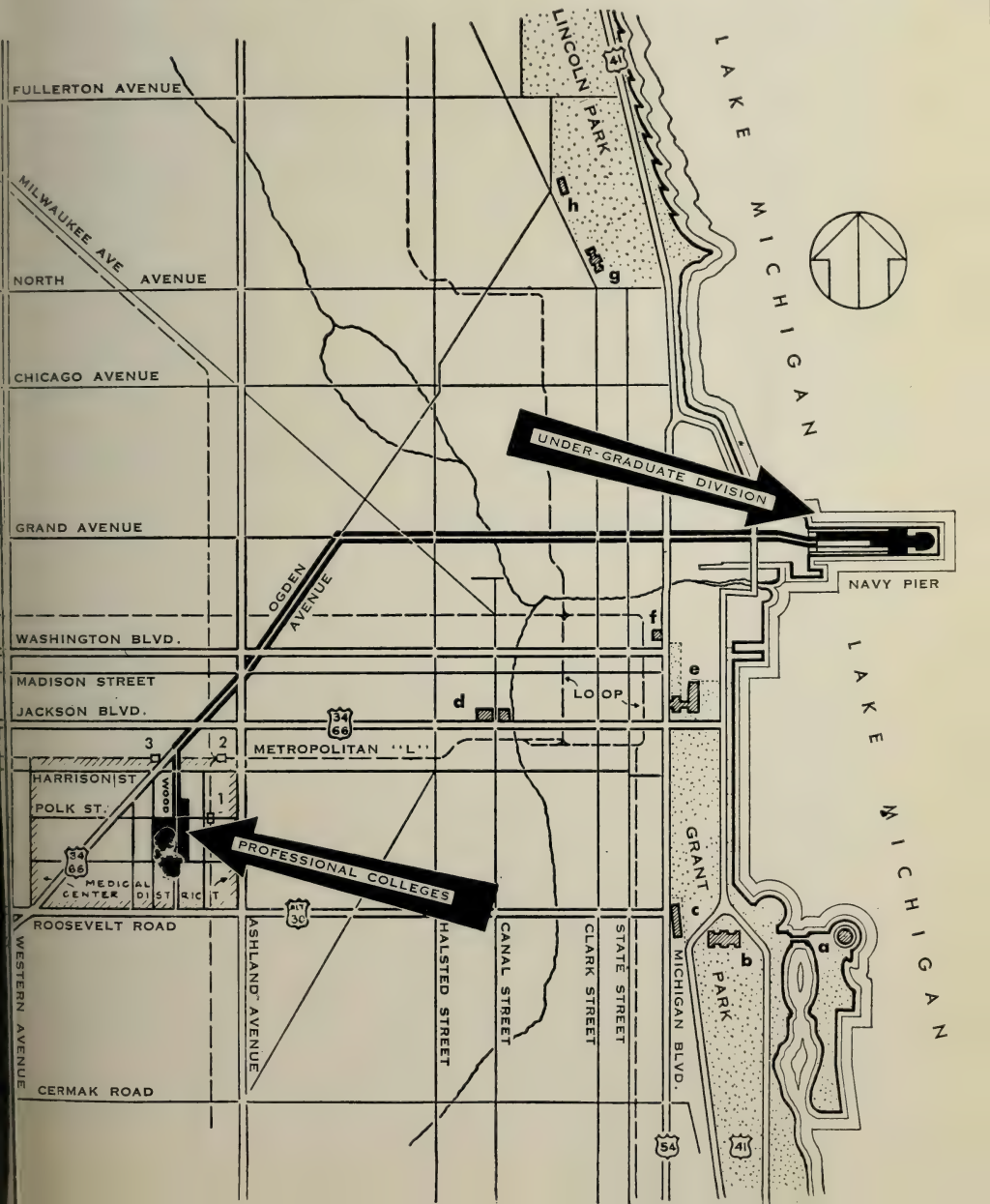
FEEDER BUS POLK AND WOOD STREETS, TRANSFER GRAND AVE. STREET CAR.

STREET CAR ASHLAND CAR ON PAULINA STREET, TRANSFER GRAND AVENUE.

"L" STATIONS 1-POLK STREET 2-MARSHFIELD 3-OGDEN AVENUE, ALL TRAINS TO LOOP, TRANSFER STONY ISLAND STREET CAR.

LEGEND

- **a** ADLER PLANETARIUM
- **b** CHICAGO NATURAL HISTORY MUSEUM
- **c** ILLINOIS CENTRAL R.R. STATION
- **d** UNION R.R. STATION
- **e** ART INSTITUTE
- **f** CRERAR LIBRARY
- **g** CHICAGO HISTORICAL SOCIETY
- **h** CHICAGO ACADEMY OF SCIENCES



chicago undergraduate division catalog

UNIVERSITY OF ILLINOIS 1956-1957

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UNIVERSITY OF ILLINOIS

ENTRANCE
UNIVERSITY
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1956/57

Your University

The Chicago Undergraduate Division of the University of Illinois is entering its eleventh school year. Since 1946 this campus of the University has offered a well-rounded educational program to thousands of students who have found it to their advantage to live in the Chicago metropolitan area while attending college. The campus is conveniently located on Chicago's Navy Pier, at the foot of Grand Avenue and Lake Michigan. This Division offers the first two years work in three colleges—Commerce and Business Administration, Engineering Sciences (including Architecture and Architectural Engineering), and Liberal Arts and Sciences—and professional curricula in Physical Education for men and women.

In addition, pre-professional courses of study necessary for admission to the professional colleges and schools of medicine, dentistry, veterinary medicine, education, journalism, and nursing are available.

The courses, held during the daytime hours only, are exactly like those offered in the same fields of study on the University of Illinois campus at Urbana-Champaign. The schedule of fees and admission requirements are the same on both campuses.

Excellent instructional facilities are provided in the school's sixty-eight classrooms and thirty-three modern, fully-equipped laboratories. A 72,000-volume library, recreational facilities, well-furnished lounges, and food service supplement the academic program. A large gymnasium adjacent to the main building houses the athletic program. The basic courses and the first year of the advanced course in Army R.O.T.C. are available on a voluntary basis for men students.

As an important part of the services of the Student Counseling Bureau, educational and vocational guidance counseling are offered to prospective students. Counseling services of the Bureau, as well as those of the Dean of Men and Dean of Women, are available to students at all times.

The Chicago Undergraduate Division, through its educational, social, and cultural program, strives to provide its student body with the same high degree of service which has been so long a part of the University of Illinois tradition.

Looking west from 5/8 of a mile into Lake Michigan provides an interesting picture of Chicago's skyline.

Admission

THERE ARE SEVEN STEPS

In order to become a student at the Chicago Undergraduate Division of the University of Illinois, an applicant must take the following steps:

1. Obtain an application for admission. The Office of Admissions and Records of the Chicago Undergraduate Division will be glad to provide application blanks for admission in response to requests received by mail, by telephone, or in person.

2. Provide the Office of Admissions and Records with an official transcript of his record in high school and his record at *each* college or institution of higher education which he has attended since leaving high school. The applicant must assume responsibility for having these records forwarded directly to the Office of Admissions and Records, University of Illinois, Chicago Undergraduate Division, Navy Pier, Chicago 11, by an official of the school concerned.

The applicant should arrange with the registrar of his high school and of *each* college or university he has attended to have his transcripts forwarded to this office as soon as possible to permit an early evaluation of his credentials.

In addition, applicants who have been on active duty in the Armed Forces must also submit photo copies of their service separation papers.

3. Decide which college and curriculum in the University he desires to enter. To assist applicants in making this decision, the Chicago Undergraduate Division of the University offers Vocational and Educational Aptitude Examinations which are followed by professional counseling. For new freshmen, these guidance examinations are a required activity of the orientation period.

However, since the *time* available for counseling during the orientation period is extremely *limited*, these examinations and counseling interviews are now being offered several months in advance. Appointmnt requests for these examinations may be made through the Office of Admissions and Records. If the applicant has any question whatsoever as to the course of study he desires to pursue in college, the University strongly urges him to take these tests and receive counseling well in advance of the orientation period.

4. Complete and return the application blank.

5. When an applicant's case is complete, that is, after his completed application blank and all necessary supporting records and transcripts have been received, the case will be evaluated. If the application is approved, the applicant will be sent a permit to enter, an appointment for such placement, guidance, and motor fitness tests as may be necessary, an appointment for a physical examination, and information as to the date and place of his college meeting and of registration. If the application is not approved, the Office of Admissions and Records will send the applicant written notice of this action, explain his deficiencies, and make suggestions as to the manner in which he may remove them and qualify for admission.

6. Report to Navy Pier for physical examination, college meeting, and tests listed in paragraph 5 above, on the dates specified in the notice which the applicant has received.

7. Register, pay tuition and fees, and start classes.

ADMISSION REQUIREMENTS

ADMISSION WITHOUT ENTRANCE EXAMINATIONS (BY CERTIFICATE)

I. High School Graduates

The admission requirements to the University of Illinois are divided into two groups: Group A, General University Admission Requirements, which apply to every student entering the University of Illinois; and Group B, Specific Subject Requirements for admission to a particular college and curriculum within the University, which apply to every student entering that college and curriculum.

Since each student entering the University of Illinois must enroll in a particular college and curriculum within the University, *each student must meet both sets of admission requirements,* i.e., the General University Admission Requirements and the Specific Subject Requirements for the college and curriculum of his choice.

A. GENERAL UNIVERSITY ADMISSION REQUIREMENTS

These requirements must be met by all applicants. For definition of the

terms used and description of the subjects acceptable in satisfaction of the requirements, please refer to C and D.

1. Graduation from an accredited high school.

2. An applicant must be at least sixteen years of age. This requirement may be waived for a student fifteen years of age on recommendation of the dean of the college concerned, provided the student resides with his parents or guardian, or someone selected by them while attending the University.

3. Fifteen units of acceptable secondary school work distributed as follows:

a. A minimum of nine units of work in the academic fields (English, mathematics, sciences, foreign languages, history, and social studies) including:

(1) At least three units of English.

(2) At least two majors (including English) and one minor selected from the list of acceptable majors and minors below.

Exception: The requirement of a second major is waived for applicants who rank in the upper half of their graduating class scholastically.

b. Six units from any of the high school subjects which are accepted by an accredited school toward its diploma and which meet the standards for accrediting.

B. COLLEGE SUBJECT REQUIREMENTS

Applicants must present credit in the subjects required for admission to the college and curriculum of their choice (see chart on page 12).

C. DEFINITIONS OF MAJORS AND MINORS

1. **Unit.** A unit is the equivalent of two high school credits, i.e., the value given to a course of study covering two semesters and including not less than the equivalent of 120 sixty-minute periods of class-room work. Two hours of work requiring little or no preparation outside the class are considered as equivalent to one hour of prepared classroom work. Fractional credits of the value of less than one-half unit will not be accepted. Not less than one unit of work will be accepted in a foreign language, elementary algebra, plane geometry, physics, chemistry, or biology.

2. **Major.** A major consists of a three-year sequence in one academic field.

3. **Minor.** A minor consists of a two-year sequence in one academic field.

Please note that the University's definition of a major and a minor may not be the same as that in use in your high school.

D. ACCEPTABLE MAJORS AND MINORS

The required majors and minors as defined may be selected only from the following five academic fields:

1. **English.** In all cases one major must be in English. Only courses in history and appreciation of literature, and in composition (including oral composition when given as a part of a basic English course) and grammar, will count toward this major. Four units in English while not required for any curriculum, are recommended by all the colleges.

2. **Foreign Language.** Three units in one language constitute a major. Two units in one language constitute a minor. The acceptable foreign languages are German, French, Spanish, Italian, Latin, and Greek. Less than one unit in a language is not acceptable for admission.

3. **Mathematics.** Only courses in algebra, plane geometry and spherical geometry, and trigonometry will be accepted toward a major or a minor in this subject. (General mathematics may be accepted in lieu of algebra and geometry in cases in which the content of the course is essentially the same as that ordinarily included in algebra and geometry. However, essentials of mathematics, business or shop mathematics, and commercial arithmetic are not acceptable toward a major or minor in mathematics.)

In the College of Engineering and in the chemistry, chemical engineering, and physics curricula of the College of Liberal Arts and Sciences, students who have only one unit in algebra and one unit in geometry, and who meet all other entrance requirements, may be admitted on condition that deficiencies in advanced mathematics be removed during their first year of residence. However, this will probably extend the time required for a degree.

4. **Science.** Including physics; chemistry; biology, or botany and zoology; general science, or physiology and physiography; astronomy; and geology. The three units required for a major must include at least a total of two units chosen from one or more of the following subjects: physics, chemistry, botany, and zoology. Biology may be offered in place of botany or zoology. The two units required for a minor must include at least one unit of physics, chemistry, or biology.

5. **Social Studies.** This field is divided into two areas:

   a. History, e.g., United States, modern, ancient, medieval, etc. Three units required for a major must include at least two units in history. The two units required for a minor must include at least one unit in history.

   b. General Social Studies, e.g., civics, economics, and sociology.

ADMISSION TO THE COLLEGE OF ENGINEERING

The mathematics requirement for admission to full freshman standing in the College of Engineering is as follows: algebra, two units; plane

geometry, one unit; trigonometry, one-half unit. The College of Engineering requires a mathematics placement examination of students presenting these credits and will adjust such students' curricula in accordance with the results of the placement examination.

Students who present only one unit in algebra and one unit in geometry, and who meet all other other requirements, may be admitted on the condition that the deficiencies be removed during the first year of residence, and with the understanding they cannot complete the requirements for a degree in the College of Engineering in eight semesters. Students who do not present the three and one-half units in mathematics as specfied may be admitted to full standing by passing a proficiency examination at the University which will indicate their preparation is adequate for entrance into analytical geometry.

II. Transfer Students

A. All requirements listed in Item I, page 7. *Exception:* An applicant who is transferring from an institution rated as Class "A" by the University and who is deficient in the admission requirements listed in Item I may be admitted if he presents at least thirty semester hours of credit in transfer with a 3.0 average ("C") and without any failures in any college subject. However, such applicants who desire to enter either the College of Commerce and Business Administration or the College of Engineering must present credit in the minimum mathemathics required for these colleges.

B. Honorable dismissal from all institutions of higher learning previously attended, and a collegiate scholastic average of at least 3.0 ("C") in terms of the University of Illinois grading system. *Exception:* An applicant whose record at some other institution comes within either of the following classifications may enter the University only on approval of the dean of the college concerned and under the conditions imposed by him:

1. An applicant on probation at, or dropped from, another institution for poor scholarship.

2. A person whose collegiate scholastic average is less than 3.0 in terms of the University of Illinois grading system.

3. (If dropped for disciplinary reasons, he must obtain the approval of the University Senate Committee on Student Discipline.

Items "1" and "2" above are not applicable for the College of Engineering, less curricula in Architecture and Architectural Engineering. Transfer students applying for the College of Engineering (except curricula in Architecture and Architectural Engineering, in which case "1" and "2" above apply) *must* present a "C" average for admission.

III. Nonresident Students

Applicants who are not residents of the state of Illinois may be admitted

(if vacancies exist after all qualified resident applicants have been accommodated) provided they meet all requirements listed in Item I, page 7, and further provided that:

A. As high school graduates they ranked scholastically in the top three-quarters of their class on graduation.

B. As transfer students they present a collegiate scholastic average of at least 3.0 ("C") in terms of the University of Illinois grading system.

IV. Special Scholastic Admission Requirements

A. High school graduates who are residents of the state of Illinois and who rank in the fourth (lowest) quarter of their graduating class scholastically, if otherwise qualified, will be admitted on scholastic probation.

B. Applicants for the following special curricula must meet the scholastic minima indicated opposite each curriculum.

CURRICULUM	SCHOLASTIC REQUIREMENTS
1. Premedical, Predental, Preveterinary Medicine, Occupational Therapy	
a. High school graduates	Rank in upper half of graduating class.
b. Transfer students	3.5 collegiate average.
2. Physics Curriculum	
High school graduates	Rank in upper half of graduating class.
3. Preprofessional Curriculum in Nursing	
a. High school graduates	Rank in upper half of graduating class.
b. Transfer students	Collegiate average of 3.0.
4. Curricula preparatory to Teaching Mentally Handicapped Children and Deaf and Hard of Hearing Children.	
a. High school graduates	Rank in top quarter of graduating class.
b. Transfer students	3.5 collegiate average.

C. College of Engineering, except curricula in Architecture and Architectural Engineering, transfer students must present at least a "C" average. Transfer students with less than a "C" average will *not* be admitted.

D. Occupational Therapy. Applicants for this program must:

1. Be less than thirty years of age.

2. Pass a special health examination given by the University Health Service.

3. Be recommended by the Director of Occupational Therapy.

Required Subjects for Specific College and Curricula

Colleges	*Subjects Required for Admission*
COLLEGE OF COMMERCE AND BUSINESS ADMINISTRATION	
All Fields (Accountancy, Commerce and Law; Commercial Teaching; Economics of Government and Business, Public Utilities, and Transportation; Economic Theory; Finance; General Economics; Industrial Administration; Insurance; Labor Economics; Management; Marketing; Personnel Management; Secretarial Training; Statistical Economics)	English, 3 units Algebra, 1 unit Geometry, 1 unit
COLLEGE OF ENGINEERING	
All Curricula (Aeronautical, Agricultural, Ceramic, Civil, Electrical, General, Industrial, Mechanical, Metallurgical, Mining, Engineering Physics, Sanitary)	English, 3 units Algebra, 2 units Plane Geometry, 1 unit Trigonometry, ½ unit (See paragraph 3, page 9)
Curricula in Architecture Design Option (for B.S. degree in Architecture); Construction Option (for B.S. degree in Architectural Engineering)	English, 3 units Algebra, 1½ units Geometry, 1 unit (See paragraph 3, page 9)
COLLEGE OF LIBERAL ARTS AND SCIENCES	
General Curriculum with majors in Bacteriology, Botany, Economics, English, French, Geography, Geology, German, History, Philosophy, Political Science, Psychology, Sociology, Spanish, Speech, Zoology Curricula preparatory to Journalism and Law Teacher Education Curricula (not requiring Chemistry, Physics, or Mathematics) Pre-professional Curriculum in Nursing (See also Paragraph IV, Page 11)	English, 3 units Language, 2 units[1] (See paragraph 2, page 9)
General Curriculum with majors in Chemistry, Physics, Mathematics, Physiology Special Curricula preparatory to Dentistry, Medicine, Veterinary Medicine (See also Paragraph IV, Page 11)	English, 3 units Language, 2 units[1] (See paragraph 2, page 9) Algebra, 1 unit Geometry, 1 unit
Special Curriculum in Chemistry	English, 3 units Language, 2 units[1] (See paragraph 2, page 9) Algebra, 1½ units Plane Geometry, 1 unit
Special Curricula in Chemical Engineering and in Physics	English, 3 units Language, 2 units[1] (See paragraph 2, page 9) Algebra, 2 units Plane Geometry, 1 unit Trigonometry, ½ unit
Curriculum in Elementary Education	English, 3 units
Curricula preparatory to Teaching Mentally Handicapped Children and Deaf and Hard of Hearing Children (See also Paragraph IV, Page 13)	English, 3 units Algebra, 1 unit Plane Geometry, 1 unit Written approval of the Teacher Education Advisor
Continuation Program in Nursing	English, 3 units Language, 2 units[1] (See paragraph 2, page 9) Certification by Director, University of Illinois School of Nursing
SCHOOL OF PHYSICAL EDUCATION	
CURRICULUM for Men and Curriculum for Women	English, 3 units Written approval of the Director of Physical Education

[1] Foreign language requirement is waived for students who rank in the upper half of their high school graduating class.

ADMISSION BY EXAMINATION

Applicants who do not meet the requirements for admission listed above may qualify for admission by passing one or more examinations as outlined below. *Exception:* This section does not apply to applicants who are deficient in the scholastic requirements outlined in Items III and IV, pages 10 and 11. Scholastic deficiencies may not be removed by examination—only by an improved scholastic record.

I. Entrance Examinations

Applicants who may be classified in any of the following categories may qualify for admission by passing University of Illinois entrance examinations as indicated under each category:

A. Graduates of Unaccredited High Schools

1. Applicants who rank in the top 25 per cent of their graduating class from an unaccredited secondary school which offers four years of instruction may qualify by passing an entrance examination in English composition and rhetoric and such other entrance examinations in high school subjects as may be necessary to complete admission requirements.

2. Applicants who are graduates of unaccredited secondary schools and rank below the top 25 per cent of their graduating class may qualify by passing entrance examinations for a minimum of fifteen units of secondary credit, including all courses necessary to meet University and specific college admission requirements.

B. Applicants who have attended an accredited high school, but who have not been graduated, may qualify by passing an entrance examination in English composition and rhetoric and additional entrance examinations for a total of *at least* four units of work in subjects to be designated by the University.

C. Applicants who have not completed any secondary school work may qualify by passing University of Illinois entrance examinations in all high school subjects necessary to meet general University and specific college admission requirements.

D. Applicants who do not meet University admission requirements with respect to total units of credit, total academic units, major and minors, or subjects required for admission to the college of the applicants' choice may qualify by passing University of Illinois entrance examinations in the subjects in which they are deficient.

These entrance examinations will be given three times a year, usually in September, January, and June. Applications to take these examinations must be filed in advance in the Office of Admissions and Records.

II. General Educational Development Tests

Veterans of active duty with the United States Armed Forces or with

the United States Maritime Service and adult non-veterans (non-veterans twenty-one years of age or older) may qualify for admission to the University by passing the United States Armed Forces Institute General Educational Development Tests under the following conditions:

A. Applicants seeking admission to the College of Liberal Arts and Sciences may qualify if their G.E.D. test scores are sufficiently high to entitle them to a scholastic rank equivalent to that of a student who has been graduated in the upper half of his class in an accredited secondary school. Applicants, whose G.E.D. scores are passing but below minimum required for upper-half classification scholastically, may qualify if they present credit from accredited sources in two successive years of an acceptable foreign language. Applicants desiring to enter specialized curricula in the College of Liberal Arts and Sciences for which mathematics is required (see page 12) may not qualify for such curricula by G.E.D. tests alone, but must present credit from accredited sources in elementary algebra and plane geometry.

B. Applicants seeking admission to the College of Commerce and Business Administration or the College of Engineering may qualify by passing the G.E.D. tests and presenting credit from accredited sources in the required mathematics.

C. Applicants seeking admission to the School of Physical Education may qualify by passing the G.E.D. tests and securing the approval of the Director of Physical Education.

Tuition and Fees

Semester Fees

Tuition and fees are due and payable in full when the student registers.

Tuition. Illinois residents (except those holding scholarships) registering in nine semester hours or more pay tuition of..... $ 65.00

Nonresidents registering in nine semester hours or more pay tuition of 175.00

Students taking eight semester hours or less pay $5 per semester hour if residents of Illinois, or $12 per semester hour if nonresidents.

Hospital and Medical Service Fee. All students registering in six semester hours or more pay as insurance for hospital and medical service a fee of..... 7.00

Laboratory, Library, and Supply Fee. All students registering in nine semester hours or more pay a laboratory, library, and supply fee of 11.00

Students registering for less than nine hours pay $5.50.

Student Activities Fee. All students registering in six semester hours or more pay a student activities fee of..... 6.00

Deposits. Each student must make a deposit of $5 at the time of his first registration. An additional deposit of $10 ($15 in all) is required of students withdrawing military equipment. Chargeable against these deposits are such items as unreturned towels and locks, lost library books, library fines, shortages in laboratory, military, and other equipment, etc. Whenever the amount of the $5 deposit falls below $2.50 or the amount of the $15 deposit falls below $12.50, the student will be required immediately by additional deposit to bring the total up to $5 and $15, respectively. Any balance in deposit will be returned to the student in case he officially withdraws from the University. This refund of deposit will be made after the close of registration for the next regular semester following the student's withdrawal. The $10 military deposit will be returned to the student, upon receipt of the military equipment, at the end of each school year.

Identification Card. Each student, on payment of tuition and fees each semester, is given an identification card for use in obtaining loans of library books, locks, towels, and other equipment. A fifty cent fee is charged for the replacement of lost or destroyed identification cards.

Summer Session Fees

Tuition and fees are due and payable in full when the student registers.

Tuition. Illinois residents (except those holding scholarships) registering in five semester hours or more pay tuition of $32.50

Nonresidents registering in five semester hours or more pay tuition of 87.50

Students taking four semester hours or less pay $5 per semester hour if residents of Illinois, or $12 per semester hour if nonresidents.

Hospital and Medical Service Fee. All students registering in four semester hours or more pay as insurance for hospital and medical service a fee of 3.50

Laboratory, Library, and Supply Fee. All students registering in five semester hours or more pay a laboratory, library, and supply fee of 5.50

Students taking less than this amount of instruction pay $2.75 for the summer session.

Student Activities Fee. All students registering in four semester hours or more pay a student activities fee of 3.00

Refunds of Tuition and Fees

In case a student withdraws from the University[1] during the first ten

[1] Students leaving the University before the end of a semester or session should initiate withdrawal papers at the office of the dean of their college. Failure to do so will result in the student being dropped for poor scholarship at the end of the semester.

days of instruction, the total amount of his tuition and fees will be refunded. After ten days and before the middle of the semester, a rebate of one-half the tuition and fees will be made. After the middle of the semester, no rebate will be allowed. In the summer term, the total amount of the tuition and fees paid will be refunded if withdrawal occurs within the first five days; one-half the amount after the first five days but within the first four weeks; and nothing after the beginning of the fifth week. If a student withdraws from one or more courses thereby reducing his study load to eight or less semester hours in the regular semester of four or less hours in the summer session, a pro rata refund of tuition and fees will be made according to the rebate schedule, provided that such a reduction of study load occurs during the full rebate period.

Miscellaneous Fees

Service Charge for Deferred Fees. A service charge of ten per cent of the amount of fees deferred, but not to exceed $3 a semester, is assessed for the privilege of deferring fees, and this charge must be paid on the day of registration. If deferred fees are paid within ten days after registration, the service charge is refunded *except* that a minimum service charge of $1 is retained by the University in all cases. The general deposit of $5 (if this deposit has not previously been paid), the service charge, and all charges from previous semesters must be paid on the day of registration. Arrangements for deferred fees are made directly with the cashier.

Change Fee. For every change of program approved following registration the fee is $1.00

Transcript Fee. Each student who has paid all his University fees is entitled to receive, without charge, one transcript of his record.

For each additional transcript the fee is 0.50

Late Registration Fee. Former students who register after the regular registration days in either semester pay a late registration fee of 5.00

Special Examination Fee. For any special examination to remove a failure the fee is 5.00

Fee to Audit Courses. Persons not connected with the University who attend the classes as listeners pay for each course 7.50

Duplicate Identification Card Fee 0.50

Veterans' Information

The Chicago Undergraduate Division has been approved to offer training under the following veterans educational benefits acts: Public Law 346, the World War II G.I. Bill; Public Law 550, the Korean G.I.

Bill; and Public Laws 16 and 894, the Vocational Rehabilitation Acts. Questions concerning benefits under these laws may be referred to the Veterans Section, Office of Admissions and Records.

The University of Illinois has established the Office of Veterans Counselor in the Dean of Men's office, Room 313. As a collateral duty, the Dean of Men gives special attention to the particular problems of veterans.

I. Authorization

To enroll under one of the above benefits at the Chicago Undergraduate Division, an applicant, in addition to applying for admission to this Division, must take the following steps:

A. Determine the course in which he will register and the highest degree toward which he plans to work. If there is any doubt as to the final vocational objective or the course to follow to reach it, some type of educational and vocational counseling should be received before completing application to the Veterans Administration.

B. Make application to the Veterans Administraion, 2030 West Taylor Street, Chicago, for the proper training authorization. A copy of service separation papers must accompany this application. Applications should be filed as early as possible, and not later than the first day of classes.

1. Applications for Public Laws 346, 16, and 894, must show the exact college and curriculum in which the veteran will register.

2. Applications for Public Law 550 need show as the goal only the highest degree desired, e.g., bachelor's degree, master's degree. Titles such as Bachelor of Science, Master of Arts, etc., should not be specified unless the applicant is certain that is the degree awarded in his course.

C. The training Certificate received from the Veterans Administration should be brought to the University on the day of registration for classes. It will not be accepted before that time. Certificates received after the beginning of classes should be turned in at once to the Veterans Section, Office of Admissions and Records, Room 15.

II. Transfers Under the G. I. Bill

Veterans transferring from another school under the G.I. Bill must obtain a notice of interruption from that school (P.L. 346 Form 7-1905e or P.L. 550 Form 7-1995) and submit it to the Veterans Administration when requesting a supplemental training certificate for this University.

A. Applications for transfer under P.L. 346 must reach the Veterans Administration before the veteran interrupts his course at his previous school.

B. Veterans transferring between divisions of the University of Illinois must follow the above procedure for changing schools if they are authorized under P.L. 550. Veterans under P.L. 346 may use the same Certificate if transferring between the Chicago Undergraduate Division and the Urbana campus, provided they do not change their college or curriculum and will register the succeeding semester.

III. Choice of Course

Veterans applying for any educational benefits should be extremely cautious in choosing their courses. Once a particular program is authorized by the Veterans Administration, the veteran may not alter that program without jeopardizing his benefits, particularly if he fails to do satisfactory work in the original course. If assistance in choosing the correct course is desired, the facilities of the University Student Counseling Bureau are available at all times (see page 20). The Veterans Administration also will provide free counseling for any veteran.

IV. Special Provisions

A. Charges for Tuition and Fees.

1. Public Law 550 requires each veteran to pay the costs of his education out of his monthly allowance. The fees listed on page 14 are payable at the time of registration for classes. The Veterans Administration will mail the first allotment check about six weeks after a veteran enters training.

2. Veterans under Public Law 346 who present a valid Certificate of Eligibility, V.A. Form 7-1953, at the time of registration will be required to pay only the $5 general deposit fee. Veterans not having the Certificate at that time will be required to pay all fees, but will receive a refund when the authorization is presented to the University. This provision also applies to veterans enrolling under Public Law 16 or 894.

B. Attendance.

The University of Illinois is required by the Veterans Administration to submit a monthly attendance report for each veteran enrolled under P.L. 550.

V. Public Laws 16 and 894

Students receiving educational benefits under either of the federal Vocational Rehabilitation Acts should be certain that there is an authorization on file for them at the University by the time they are to register for classes. Early application for training should be filed with the Veterans Administration Training Officer.

VI. Military Scholarships

Any persons who served in the armed forces during World War I or any time between September 16, 1940, and the official termination of the present national emergency and received an honorable discharge may qualify for a four-year tuition scholarship if he was a resident of Illinois or a student in the University of Illinois at the time of entering service. No examination or minimum grade average is required. Information and application blanks are available from the Office of Admissions and Records, Room 15, Window E. The Military Scholarship may not be used during any period when the veteran is receiving financial aid for his education from the federal government.

VII. Credit for Military Service

Through the Examiner and Recorder of the Chicago Undergraduate Division, the veteran can ascertain to what extent he may meet entrance requirements by credit for service or for courses taken through the United States Armed Forces Institute. Credit in military science, physical education, and hygiene will be granted to any veteran, honorably discharged, who presents evidence that he has completed the basic training program in the Army, Navy, Marine Corps, or Coast Guard. Credit for work taken in college training programs in technical schools, and in courses pursued while the veteran was in service, may be transferred upon the basis of evaluation by the Examiner and Recorder.

Scholarships

Several types of scholarships are available to undergraduate students in the University of Illinois. Some of these are the County Scholarships awarded on the basis of a competitive examination administered each April by the County Superintendent of Schools, the State Military Scholarships, the General Assembly Scholarships, and, in addition, a number of scholarships awarded by the University Scholarship Committee each spring for the following school year. All the scholarships offered, and the individual requirements, are listed in an information folder available upon request from the Office of Admissions and Records at Navy Pier.

Undergraduate scholarships usually cover tuition charges only. Although some are available only to students in a specific course, the majority may be used in any of the colleges. Students now enrolled may apply for a scholarship for any year; a few scholarships, however, may be awarded only to applicants without college experience. Information regarding scholarships may be obtained from the Office of Admissions and Records, Window E, Room 15, or from the Office of the Dean of Students.

Selective Service Deferment

The Office of Admissions and Records will supply required certificates for students who wish to apply for educational deferments under the regulations of the Selective Service System. Application should be made at Window E, Room 15, at the time the student completes his classification questionnaire. Information concerning educational deferments also is available from this office.

Student Welfare Services

The University's interest in the individual student extends beyond the classroom to include each student's personal adjustment to college life. To this end, the University provides a broad program of educational, vocational, and personal counseling; instruction in healthful living; and extracurricular activities, both social and cultural.

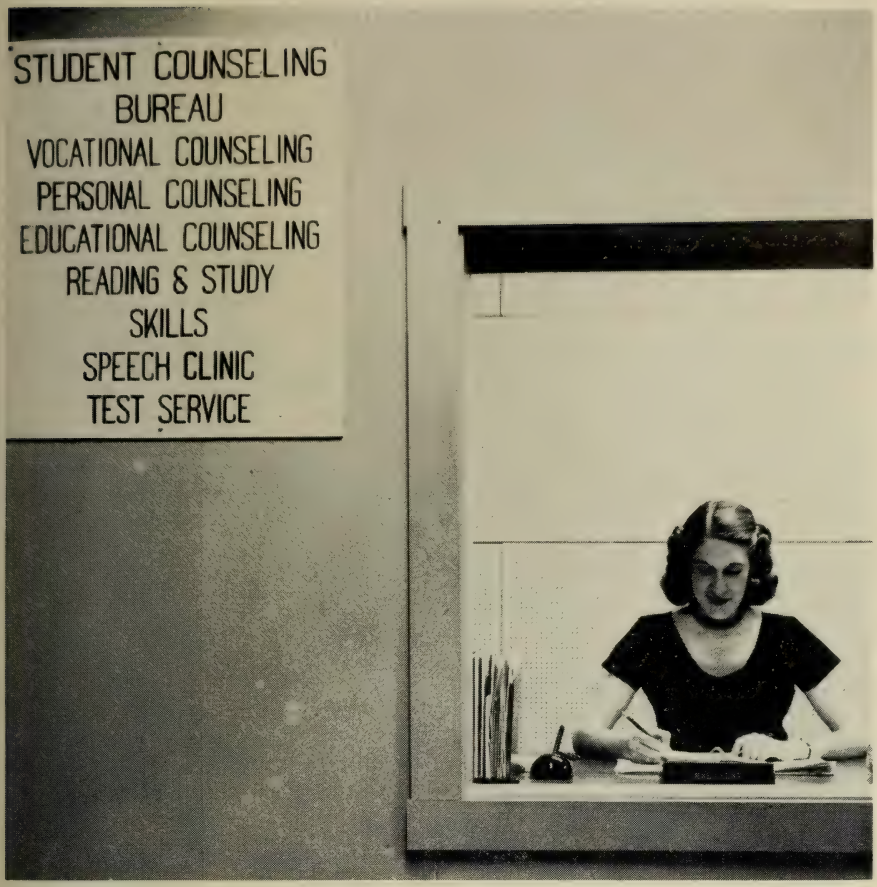
Aid in adjustment to college life begins before the student enrolls at the Chicago Undergraduate Division, with the services of the Student Counseling Bureau available to prospective students seeking help in planning their college careers. New students have an opportunity to meet the deans and directors at a special meeting at the start of each semester.

Counseling facilities of the Student Counseling Bureau, offices of the Dean of Students, the Dean of Men, the Dean of Women, and the Health Service are available to students at all times during their college work at the Chicago Undergraduate Division. Students are also urged to discuss specific educational problems with their instructors. Members of the instructional staff hold weekly office hours for conferences with individual students.

Student Counseling Bureau

The Student Counseling Bureau helps registered and prospective students to make effective use of their own capacities and the University's resources. It assists students in meeting their individual needs and in coping with a wide variety of problems that occur in the course of college life. Students and prospective students are aided in making decisions about which college or educational program to select in the University, in arriving at suitable vocational choices, and in analyzing and relieving difficulties in studying. Counselors also aid students in removing stumbling-blocks to overall personal growth and success, and in realizing their capacity for fuller and more rapid development.

A. Individual Counseling: Students who feel they have needs or problems, and those who for any reason find they are not fully profiting from college life, are invited to talk over their situation with a professional counselor. Interview schedules are flexible, and students usually can arrange for as much counseling time as they need. Professional aid can help students to improve their own problem-solving ability, to do more effective planning, to lead fuller lives academically and socially, and to derive maximum benefit from their college careers.



The Student Counseling Bureau helps students with studying and other personal problems.

B. Test Services: Tests of special aptitudes, abilities, vocational and academic interests, and measures of personal-social adjustment, may be taken by individual arrangement with a counselor. These counseling aids are frequently valuable in self-evaluation and in making plans appropriate to one's abilities, aptitudes and life-situation.

The Counseling Bureau also gives a comprehensive battery of guidance tests to prospective and entering freshman students, and each person may review his test results in a personal interview with a counselor to aid self-evaluation and individual planning. Test scores show relationships between one's own high and low interests and aptitudes, and they also give a basis for comparing oneself with other college students. In addition, many other tests and interest inventories are available to all students at the Chicago Undergraduate Division.

C. Occupational Information Services: In conjunction with the Library Department, the Student Counseling Bureau maintains one of the

most comprehensive and up-to-date files of job information available in the State of Illinois. Facts and figures about required qualifications and preparation, pay scales, demand for employees, chances for advancement, and other advantages and disadvantages of thousands of occupations are kept easily accessible to students.

D. Group Counseling: Group counseling sessions are available at a number of times throughout the year, including the summer. This program is intended for students who have found problems in doing their college work, as well as for those who are making good progress but feel a need to increase their personal efficiency in and out of college. Groups are kept small and usually meet twice a week. Group work is geared in with individual counseling where appropriate. Some of the groups deal with a variety of common student problems. Other groups give more specialized attention to such problems as: reading for different purposes, improving powers of concentration, aiding the ability to remember, improving preparation for course examinations, taking more usable notes, organizing one's time more efficiently, and learning a variety of methods for studying different courses and course-materials.

A personal interview before admission to this program helps one in selecting a group appropriate to individual needs.

E. Location: The Student Counseling Bureau occupies a suite of rooms on the third floor, near the east end of the building. It is near a student lounge on the same floor, and adjacent to the offices of the Dean of Students and the Health Service.

Receptionists are in attendance to aid students in making and meeting appointments. Additional information may be obtained at the reception desk, or by calling Ext. 115 at WHitehall 4-3800.

The Speech Clinic

The services of the Speech Clinic are available to those students who want assistance in correcting speech difficulties and to students who desire to increase their effectiveness and fluency in talking to others. Students who have foreign accents, hearing deficiencies, or vocal, rhythmic, or articulatory problems are aided by the clinic. The clinic also assists students with the problems that sometimes arise in appearing and talking before groups. Students planning theatrical, teaching, or speech careers are aided in meeting professional speech requirements.

There are no fees for these services, but some students may be asked to purchase a blank recording disk (about eighty-five cents) in order that permanent recordings of their voices may be made. The Speech Clinic is located in the Student Counseling Bureau area on the third floor. It is advisable to make appointments in advance.

Dean of Students

The Dean of Students is in charge of most matters of student welfare and extra-curricular activities. The principal assistants in the Office of

the Dean of Students are the Dean of Men, the Dean of Women, and the Assistant to the Dean of Men. These are the general advisers to whom students may go for assistance and advice. The offices of these advisers are open to any student, throughout the day, and inquiries from parents and guardians are welcomed. Details of the services available in the Office of the Dean of Students are given in the following sections.

In addition, the Dean of Students is the administrative officer responsible for all extra-curricular activities and is charged with the co-ordination of the extra-curricular programs of the recognized student clubs and organizations. He is also adviser to foreign students at the Chicago Undergraduate Division.

In connection with the responsibility for student welfare, the Dean of Students is an ex-officio member of the Disciplinary Committee.

DEAN OF MEN

The Office of the Dean of Men is organized for the primary purpose of aiding men students. The work of the Dean of Men is in counseling students and advising them on any matters which they wish to bring to him. He is available for individual conferences with students daily. The Dean of Men takes an active part in student extra-curricular affairs through his membership on the Committee on Student Affairs, through his chairmanship of the Administrative Committee on Finance and Audit for Students Organizations, and his duties as secretary of the Student Organizations Fund. He also serves as adviser to Phi Eta Sigma, national scholastic honorary for first-year men students; as Veterans Counselor; and as a vice president for the Parents Association. All official University requisitions for student organizations, events, and affairs are initiated by the Dean of Men, and he serves as financial adviser to student organizations.

The Hospital and Medical Service plan for the students and the voluntary plan for the staff are under the supervision of the Dean of Men. Attendance records for both veteran and non-veteran students are maintained by the Office of the Dean of Men.

DEAN OF WOMEN

The Office of the Dean of Women is the clearing place for the problems of women students. Students are urged to come with questions that inevitably arise—social, personal, academic, or financial.

In addition to the friendly, sympathetic counseling of women students, the Dean of Women serves as the adviser to women's organizations at the Chicago Undergraduate Division; as sponsor of Alpha Lambda Delta, national scholastic honorary for freshman women, Activities Honorary Society, and University Dance Committee.

All student social events are co-ordinated and unified through her office in her capacity as chairman of the Administrative Committee on Social Events, Calendar, and Recreation. She offers helpful assistance to student groups in organizing dances, entertainments, special events, and other all-University functions.

The Dean of Women's office provides personal as well as academic counseling for all women students.

ASSISTANT TO THE DEAN OF MEN

The Assistant to the Dean of Men is responsible for handling such duties as may be delegated to him by the Dean of Men, including questions pertaining to the Hospital and Medical Insurance Plan. In addition, he is charged with the responsibility for the development of the music program of the Chicago Undergraduate Division, for co-ordinating and assisting in all extra-curricular music activities, and for individual conferences with students as required.

LOAN FUNDS

Loan funds have been established for the benefit of worthy students of the University who are in need of financial aid. They are of two general classes: (1) emergency loan funds, and (2) long term or regular loan funds. Most of these funds have special qualications which must be met by applicants.

Detailed information regarding loan funds and application blanks may be obtained from the Office of the Dean of Men.

STUDENT EMPLOYMENT

For students who find it necessary to earn a portion of their expenses,

the Student Employment Division in the Office of the Dean of Men provides information and assistance to needy students desiring part-time jobs, both in University offices and in industry and business in the Chicago area. Applications for part-time jobs should be filed with the Student Employment Manager, Room 313.

The student who expects to be employed will find it to his advantage to arrange his class schedules, at the time of registration, so that consecutive hours are free each day. Employment for the first-year student should be a matter of necessity rather than choice.

HOSPITAL AND MEDICAL SERVICE

A Hospital and Medical Service fee of seven dollars is charged each student at the time of registration to provide limited care in an approved hospital for a basic period of thirty days in any semester. In addition, specific benefits are provided to apply toward the physician's or surgeon's fees during the period of hospitalization, and certain stated benefits are allowed for ambulance expense when the need therefor is certified by the Director of the Health Service, for consultant fees, for outpatient treatment, and for miscellaneous hospital expense such as laboratory tests, anesthetic and administration thereof, use of operating room, medicines, drugs, dressings, blood transfusions and administration thereof, and X-rays. A catastrophy clause takes effect after the student has paid an additional amount of hospital and doctor bills equal to fifty percent of the basic benefits of the policy. Students are urged to read their certificates carefully to determine the exact benefits that apply to specific situations. The Hospital and Medical Service plan is under the supervision of the Dean of Men. If the student did not receive a certificate at the time of registration, or if there are questions pertaining to this insurance, he should request the Dean of Men, University of Illinois, Navy Pier, Chicago 11, Illinois, to supply the necessary information.

The dependents of students may be covered under this same insurance plan by the payment of an additional fee. In order to enroll dependents, application must be made and the necessary fee for such coverage paid to the University cashier within three weeks of the effective date of the insurance of the student member.

Note: A student who presents evidence of participation in any other group insurance system providing equal or greater benefits than those governed by the University fee may petition, through the Office of the Dean of Men during the first ten days of registration, for a refund of this fee.

Extra-curricular Activities

Student extra-curricular activities are recognized as an important part of the student's life and are encouraged in part as an adjunct to curricular courses; to develop individual talents in speech, music, drama, journal-

ism, radio production, etc.; and to develop qualities of leadership, personality, and character. Many student clubs and organizations are active on the campus. These groups sponsor varied social and cultural activities for the benefit of the entire student body. These student groups may meet during the scheduled activity hour on Tuesday of each week and on the second and fourth Thursdays of each month. All questions pertaining to extra-curricular activities should be directed to the Dean of Students, Room 313.

The Committee on Students Affairs is an official body, made up of students, faculty, and administrative personnel, appointed to assist the Dean of Students in the development and supervision of student extra-curricular and student government activities.

The Student government organization, the Student Congress, is composed of four officers and twenty representatives. The officers and ten of the representatives are elected by a vote of the entire student body at a general election each year, but the other ten representatives are elected by student organizations to provide one representative for each of ten groups of recognized student activities. Officers of the Congress serve on the Committee on Student Affairs.

Joint student-faculty administrative committees assist in the supervision of student organizations. These committees, in each case, are composed of a faculty representative of the Committee on Student Affairs and two members of the Student Congress. The administrative committees review all matters referred to them, and make recommendations to the Committee on Student Affairs and the Student Congress for appropriate action. Students are provided an opportunity for experience in journalism through the weekly student newspaper, the *Pier Illini,* written and edited entirely by students. Engineering students edit the Chicago Undergraduate Division section of the *Illinois Technograph,* the University of Illinois engineering periodical.

Supplementing classroom work, three language clubs, The Future Teachers of America, Pershing Rifles and the Cadet Association, the Activities Honorary and the Forensics Honorary, and the Commerce, Veterans-Illini, International Relations, Amateur Radio, Chess, Fencers, Humanities, and the UIC Flying clubs provide cultural programs for the students. Engineering, architecture, chemistry, pre-law, and pre-medical students may take part in the activities of their respective professional societies, several of which are affiliated with national professional organizations.

Students interested in music and drama may seek membership in the University Band, the University Choir, the Music Appreciation Club, or the Pier Playhouse. Extra-curricular organizations in athletics and physical education include the Varsity Lettermen's Club, Orchesis, the modern dance organizations, the Co-Recreational Association, and the Women's Athletic Association.

All-University dances are sponsored by the University dance committee. Honorary scholastic societies include Alpha Lambda Delta for freshman women and Phi Eta Sigma for freshman men.

Badminton is just one of the recreational activities offered women in their physical education and intramural activities.

Debating

The forensics program at the Chicago Undergraduate Division provides an opportunity for students to gain experience in debating, discussion, and individual events. All students, including those without previous experience, may take part in the forensic activities.

The debating program begins each fall with an instructional program for newcomers and an intramural tournament. From mid-November to mid-April a full schedule of intercollegiate competition is maintained. In addition to Chicago-area colleges and universities which come to the Chicago Undergraduate Division for debates, guest teams from outside the city have included colleges and universities from Florida, Texas, Iowa, Michigan, Missouri, Ohio, and New York. Speakers from the Chicago Undergraduate Division also attend tournaments in Illinois and nearby states, where they meet debaters from schools throughout the country.

Since its organization in 1947, the debate team has engaged in both junior and senior college competition. It has won the Chicago Area, the state, and the regional championships, and in 1952, 1953, 1954, and

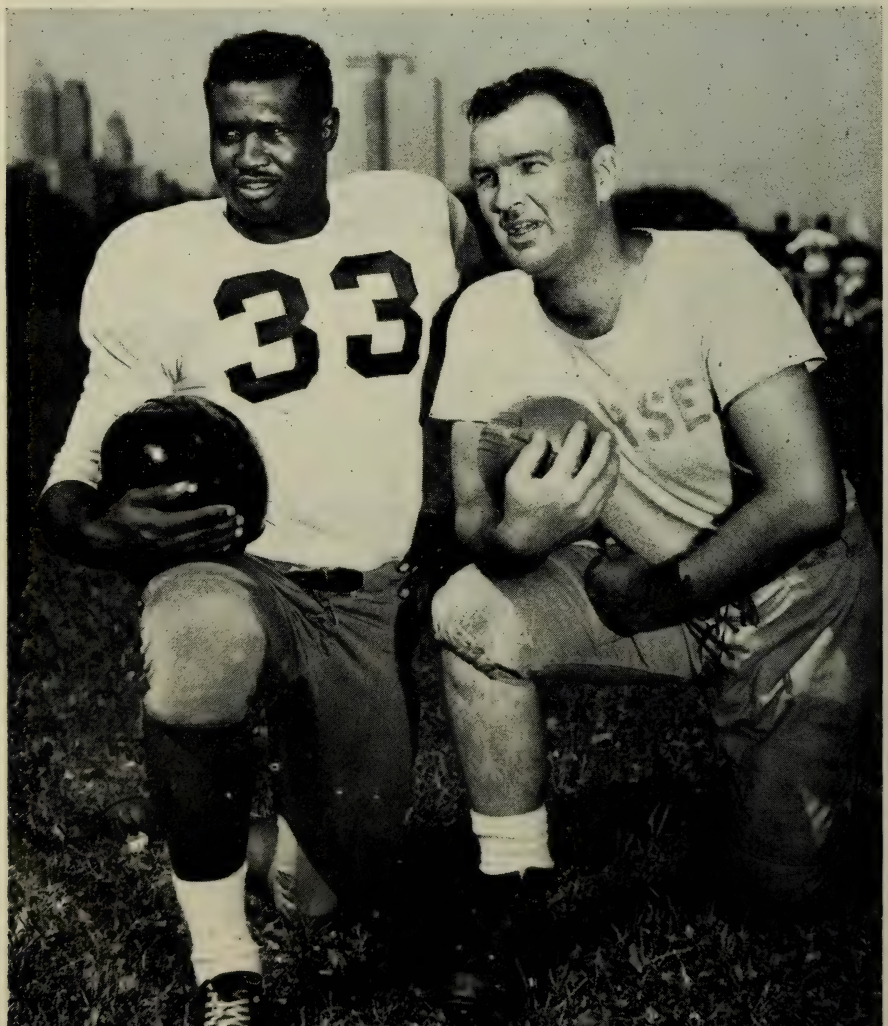
1956 represented the East Central States area in the national championship tournament at West Point, New York.

Problems of national and international interest are the topics for public discussion and panel presentations, both on and off campus. These programs, usually followed by audience participation, are sometimes joint presentations with other colleges and universities. Chicago Undergraduate Division speakers are often featured on adult forum programs.

Athletics

The Chicago Undergraduate Division participates in eleven varsity sports—football, basketball, baseball, cross-country, track, wrestling, swimming, soccer, gymnastics, tennis, and golf. In accordance with a special ruling, freshmen in good standing are allowed to participate in varsity sports.

UIC has a complete varsity athletic program. The school's first football All-American, Carnell Neuman talks over the team's future with head coach Walt Versen.



A special feature is the extensive intramural program in which students can elect to take part in wrestling, badminton, table-tennis, volleyball, basketball, gymnastics, handball, weight-lifting, tennis, track, and softball. The intramural and intercollegiate programs are under the supervision of an athletic committee of student and faculty representatives. Both programs are financed through funds from student activities fees. The Chicago Undergraduate Division Gymnasium, adjacent to the entrance of the main building, is the center of the intramural and physical education programs. Basketball games, wrestling meets, and gymnastics meets are also held in the gymnasium which has floor space for eight full-size basketball courts.

A staff of sixteen coaches directs the Chicago Undergraduate Division athletic activities. Varsity letter awards are made to athletes who meet the participation requirements of intercollegiate competition, to sophomore managers, and to sophomore cheerleaders.

University Services

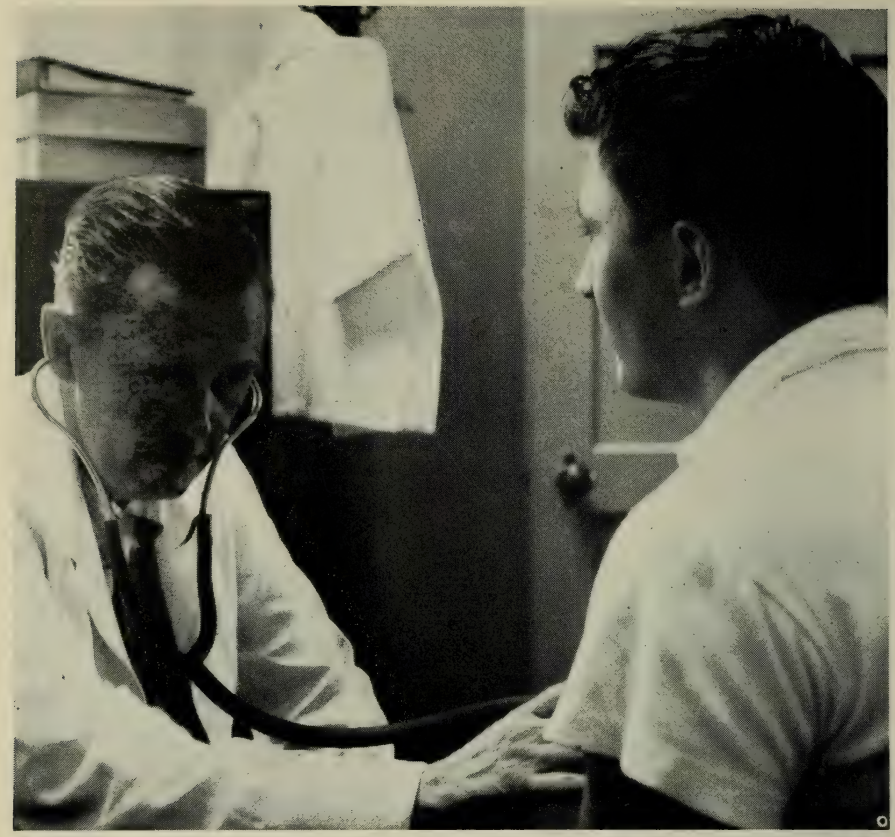
University Library

The library of the Chicago Undergraduate Division is among the best of the newer college libraries. Although only ten years old, it contains more than 70,000 volumes, which have been carefully chosen with undergraduate curricula in mind, as well as general and recreational interests of students and faculty. Orders for new books are being placed constantly.

While no attempt is made to duplicate scholarly research facilities already available in the city, emphasis is placed on general reference, library instruction, and readers' advisory service, with liaison maintained with the teaching program and student activities.

An excellent collection of general and special encyclopedias, atlases, bibliographies, dictionaries, handbooks, year books, and directories (6,000 volumes) has been assembled. A complete card catalog is provided and thirty periodical indexing services are available. The subscription list includes nearly 700 magazines and journals. Twenty-year back files of 300 particularly useful periodicals have already been bound for permanent reference use and are available on open shelves. An extensive vertical-file pamphlet collection, excellent microprint and microfilm reading facilities, vocational guidance materials, and college catalogs are also provided.

The Library has three service areas. The open-shelf Main Reading Room is located on the second floor at the east end of the building. It offers liberal reference and circulation facilities, in addition to well-lighted study space for 700 students. The Reserve Book Station, located near the bus line, makes assigned reading materials conveniently available. The Fine Arts Reading Room (Room 246) offers special facilities in architecture and art. The Library staff of twenty-six includes eleven professional librarians, and fourteen full-time clerks. Library hours are 8 a.m. to 4:30 p.m. Monday through Friday.



UIC's Health Service provides thorough physical examinations for all students.

University Bookstore

The University Bookstore is operated by the University to provide faculty approved texts and supplies as required by the various courses at the Chicago Undergraduate Division.

The Bookstore is located at Room 87. It is open daily, Monday through Friday, from 8:30 a.m. to 4:30 p.m. During the registration period, the Bookstore is open from 8:30 a.m. to 6 p.m.

Food Service

The University operates non-profit food service facilities for the convenience of students, faculty, and staff. The student cafeteria serves well-balanced, low-cost lunches and breakfasts. The cafeteria is located at the east end of the building. A soda fountain, serving sandwiches and beverages, is operated in connection with the cafeteria.

A popular student spot between classes is the snack bar located at the entrance to the building, adjacent to the reception lounge. In addition, a dining room at the east end of the building offers cafeteria-style service to members of the faculty and staff.

Health Service

The University maintains a Student Health Service to promote better physical and mental health among the students at the Chicago Undergraduate Division. Physical examinations, given by the staff of the University Health Service, are required of all students prior to the time of their first registration and each year thereafter. Chest X-rays are required as part of the physical examination. Immunizing inoculations for smallpox, tetanus, diphtheria, influenza, and typhoid fever are available to students without charge.

The staff of five physicians instructs classes in hygiene and sanitation. As the functions of the Health Service are primarily educational and preventive, its staff does not assume responsibility for the care of students beyond giving medical advice, emergency treatment, and vaccinations.

It is emphasized that advice to students contemplates a real concern for the best treatment whenever indicated and that the discussion of student welfare problems with the staff of the Student Health Service is encouraged. Members of the staff are available at all times for conferences with the students about individual health problems. The Health Service is located on the third floor at the east end of the Pier. The office is open from 8 a.m. to 5 p.m. daily and during vacation periods.

Courses Required of All Students

The following course requirements must be met by all students registered at the Chicago Undergraduate Division. These subjects are to be started in the first semester of the freshman year, except as otherwise provided, and are to be continued until these requirements are completed.

1. Men and women entering the University with less than sixty semester hours of credit are required to secure four semesters of credit in physical education including the amount transferred. Those entering with sixty semester hours or more are exempt from the requirement in physical education.

2. Hygiene is required of all students entering the University of Illinois with less than thirty semester hours of credit irrespective of the college in which they enter unless they have previously had equivalent credit in this course. Students entering with thirty semester hours or more are exempt from this requirement.

3. Two semesters of rhetoric (Rhetoric 101 and 102) are required. All students entering the University as freshmen direct from secondary schools are required to take a placement test in rhetoric. A satisfactory proficiency in the use of written English is a requirement for all undergraduate degrees. Students who receive grades of "C" or "D" in Rhetoric 102, or its equivalent, are required to take an English qualifying examination before graduating. Those who fail to pass the qualifying examination are required to pass an extra semester course in rhetoric (Rhetoric 200).

The Grading System

The following grades are given in the University of Illinois: A — Excellent, B — Good, C — Fair, D — Poor (lowest passing grade), E — Failure.

The University does not use plus or minus signs with the letter grades. Further, there are no numerical equivalents.

A student with a failure may have a special examination on the recommendation of the head of the department approved by the dean of his college, and on payment of a fee of $5, or he may take courses in sequence, with the approval of the department.

Other symbols in use are:

W — Withdrawn from the course without penalty.

Ex — Absent from the final examination for reasons acceptable to the dean of the college concerned and hence "Excused." (Entitles the student to an examination later without fee, but becomes a failure if not removed during the first semester that the student completes in residence following the giving of the grade of "Ex.")

Rep — Replaces grade of "Ex" when course in which "Ex" grade was received is repeated by the student. A student may earn credit in a course in which he receives an "Ab" grade by taking a special examination (fee $5) during the next semester in which he is in residence, but not to be taken within ten days of the final examination period.

Inc — The grade of "Incomplete" is no longer authorized except in the required work in physical education. Except in this department instructors are required to assign a definite grade representing both the quality and the quantity of the work accomplished.

Grade-Point Average

In computing the grade-point average, weighted values are given to the grades as follows: A = 5 grade points; B = 4; C = 3; D = 2; E = 1; Ab = 1. To compute the grade-point average, multiply the number of hours of each grade by the weight, add the products, and divide by the number of hours. Thus, if you earn three hours of A, six of B, three of C, two of D, and four of E, the computation of your grade-point average is as follows:

Grade	Hours	Weight	Grade Points	
A	3	5	15	
B	6	4	24	
C	3	3	9	
D	2	2	4	
E	4	1	4	$\frac{56}{18} = 3.111$
	18		56	

Your grade-point average is 3.111.

College of Commerce and Business Administration

Through knowledge of modern business practices and the fundamental principles on which economic systems operate, the College of Commerce and Business Administration seeks to develop in students the intellectual powers necessary for administrative careers. For this purpose it offers a unified program of basic studies for freshmen and sophomores. Though the factual contents of many of the courses are directly useful in specific vocations, students should expect to serve an apprenticeship in the fields they enter after graduation from this college if they wish to prepare themselves for higher positions.

While concentrating in a special field, students are encouraged to elect courses offered in other colleges of the University and to secure as liberal an education as possible to avoid the narrowing effects of early specialization.

The courses required and available in the first two years in this college are primarily organized to serve as a foundation for building the study in a field of concentration in the junior and senior years.

Students who have completed this two-year program with a satisfactory scholastic record are qualified for admission to the Upper Division of the College of Commerce and Business Administration or for admission to the College of Education, the College of Law, or the School of Journalism and Communications. Students transferring to other colleges after completing only the two-year program of the College of Commerce receive their degrees not from the College of Commerce and Business Administration, but from the college to which they transfer on completing the requirements of that college.

Another group of students has not been forgotten. This group comprises those who will not be able to attend school for more than one or two years. The program is so arranged that the maximum benefit of basic business knowledge can be obtained in that more limited period.

Summary of Requirements for Graduation

A candidate for the degree of Bachelor of Science in a field of the College of Commerce and Business Administration must:

1. Fulfill general University requirements as to registration, residence, scholarship, and fees.

2. Have a total of 130 credit hours of which not less than sixty credit hours must be in Accountancy, Business Law, Economics, Management, and Marketing. Secretarial Training courses may be included in the fields of Commercial Training and Secretarial Training. In Commercial Teaching and Commerce and Law only forty-five such hours are required, while in Industrial Administration the number of such hours is fifty-four, and in Personnel Management, fifty hours.

3. Complete courses included in University requirements, College General Education requirements, and College General Business requirements. (See pages 35 and 36.)

4. Complete the requirements for one of the fields of concentration. (See page 36.)

5. Have a minimum average of 3.0 for all courses counted toward graduation.

Electives

Whenever a program for any session includes all possible required courses at that time, and it seems desirable to add other courses to make a reasonable number of hours, certain electives are recommended. Prerequisites for these electives should be observed carefully. These electives should be directed toward requirements in the Upper Division. They include management, marketing, anthropology, history, philosophy, political science, psychology, and sociology, as well as additional courses in mathematics, science, English, or foreign language. Any advice desired on these electives may be obtained at the office of the dean or from the adviser at the time of registration.

Commerce and Law

Students interested in obtaining a legal education may take their pre-legal work in the College of Commerce and Business Administration. This preparation should be of particular interest to students looking forward to some phase of the legal practice involving business or corporation law. The general requirements are the same as those for all Commerce students shown on page 35. The third year includes requirements of special value to the pre-law student. The courses involved here include commerce courses as well as those in political science, history, and philosophy.

When a student has completed 100 hours in the College of Commerce and Business Administration and thirty hours in the College of Law, including all required courses and all other graduation requirements, he will be granted the degree of Bachelor of Science in Commerce and Law. Upon completion of the requirements of the two remaining years in the College of Law, the law degree will be granted.

Commercial Teaching

Since there are certain state requirements for certification of teachers in Illinois high schools, a special program to meet these requirements for commercial teachers has been established in the College of Commerce and Business Administration. The approved program for this field for the first two years is shown on page 36.

Prejournalism

Students desiring to enter the School of Journalism and Communications may do so after the completion of two years with proper grade average in the College of Commerce and Business Administration. Those inter-

ested in advertising and other business phases of journalism may find consideration of this program profitable. The general program for this purpose is the same as that shown below.

Requirements for All Commerce Students

(Except Commercial Teaching)

	CREDIT HOURS	NORMAL SEMESTER
I. University Requirements. All available at the Chicago Undergraduate Division.		
Hygiene	2	1
Military[1]	4	1, 2, 3, 4
Physical Education	4	1, 2, 3, 4
Rhetoric 100[2], 101, 102	6	1, 2, (3)
Total	16	
II. College General Education Requirements. All available at the Chicago Undergraduate Division		
Economics 100—Introduction to Business (strongly recommended)	(3)[3]	2
Economics 136—Economic History of the United States, or Economics 138—Introduction to the Economic History of Modern Europe, or Geography 105—Introductory Economic Geography	3[3]	1
Literature or Language[4]	6	1, 2, 3 or 4
Mathematics 103—Introduction to College Algebra and Mathematics 112—College Algebra[5]	0 to 6	1, 2
Rhetoric 151—Business Letter Writing	3	3 or 4
Science or Advanced Mathematics[6]	4	1 or 2
Social Science (Anthropology, History, Philosophy, Political Science, Phychology, or Sociology) a minimum of six hours; a minimum of three hours of advanced economics	9 to 12	3 or 4
Speech 101—Principles of Effective Speaking	3	1, 2, 3 or 4
Additional hours in Language, Literature, Advanced Mathematics, Science, Social Science, Art, Architecture, and Geography to bring the total of this group, excluding Economics 100, to 36 credit hours	0 to 11	
Total	36	
III. College General Business Education Requirements. All except those shown with an asterisk are available at the Chicago Undergraduate Division.		
Accountancy 101—Principles of Accounting	3	1
Accountancy 105—Accounting Procedure	3	2
Accountancy 106—Elementary Cost Accounting (recommended), or Accountancy 108—Intermediate Accounting	3	3
Business Law 100—Basic Principles of Business Law	3	4
Economics 102, 103—Principles of Economics	6	3, 4
Economics 170—Elements of Statistics	3	4
Economics 250—Money, Credit, and Banking*	3	
Economics 254—Business Finance*	3	
Management 101—Industrial Organization and Management	3	4
Marketing 101—Principles of Marketing	3	4
Commerce electives*	6	
Total	39	

[1] Not required if first sixty credit hours are taken at the Chicago Undergraduate Division.

[2] Not required unless placement examination so indicates.

[3] For freshmen only. Students with thirty credit hours or more should not take this course.

[4] If literature is elected, six hours of American or English literature will satisfy the minimum requirement. If language is elected, it must be a modern foreign language and the equivalent of four semesters when pursued in college must be taken to satisfy requirements.

[5] A student should always be guided by his placement examination but, in general, one who has one year of high school algebra must take Mathematics 103 followed by Mathematics 112; one who has one and one-half years of high school algebra must take Mathematics 112; and one who has two years of high school algebra need not take any college algebra unless he wishes.

[6] If science is elected it may be any laboratory science (geography is not included here). If mathematics is elected it may be any course in advance of college algebra, trigonometry included.

IV. Field of Concentration Requirements and Free Electives.
Sufficient credit hours must be taken here to make a grand total of 130 credit hours. None of the required courses in the fields of concentration are available at the Chicago Undergraduate Division.
Fields of Concentration:
Accountancy
Commerce and Law
Commercial Teaching (special program)
Economics of Government and Business, Public Utilities, and Transportation
Economic Theory
Finance
General Economics (eight sub-fields)
Industrial Administration
Insurance (two sub-fields)
Labor Economics
Management
Marketing (nine sub-fields)
Personnel Management (three sub-fields)
Secretarial Training
Statistical Economics (six sub-fields)
Urban Land Economics

Further information about any of these fields of concentration or any other academic questions arising in connection with any of the above material should be directed to the Associate Dean in charge of the College of Commerce and Business Administration, Room 27.

Curriculum Preparatory to Teaching Commercial Subjects

FIRST YEAR FIRST SEMESTER 17 HOURS	
Accy. 101—Principles of Accounting	3
Biology 101—Fundamentals of Biology	4
Econ. 136—American Economics History, or Econ. 138—European Economic History	3
Math. 112—College Algebra[1]	3
Rhet. 101—Rhetoric and Composition	3
Physical Education	1

SECOND YEAR FIRST SEMESTER 16 HOURS	
Accy. 105—Accounting Procedure	3
Biology (choice)	4
Econ. 100—Introduction to Business	3
Ed. 101—The Nature of the Teaching Profession	2
Hygiene 101—Personal and Environmental Hygiene	2
Rhet. 102—Rhetoric and Composition	3
Physical Education	1

SECOND SEMESTER 17 HOURS	
Accy. 106—Elementary Cost Accounting	3
Econ. 102—Principles of Economics	3
Geog. 105—Introduction to Economic Geography	3
Sociol. 100—Principles of Sociology	3
Speech 101—Principles of Effective Speaking	3
Physical Education	1

SECOND SEMESTER 18 HOURS	
Econ. 103—Principles of Economics	3
Hist. 152—History of the United States	3
Mktg. 101—Principles of Marketing	3
Psych. 100—Introduction to Psychology	4
Elective[2]	3
Physical Education	1

[1] May require adjustment if entrance credit includes only one unit of high school algebra.
[2] This could include Business Law 100, Political Science 150, or Rhetoric 151 as specific requirements; Accountancy 108, American or English Literature, or Philosophy 105 as option electives; Management 101 as a free elective. Whichever ones are chosen would affect the junior or senior program in that respect.

In addition to the fundamental and technological courses in each curriculum, cultural courses are required, such as history, economics, and rhetoric. Other courses are elective and are presented to provide the student with an awareness of the urgent problems of society and to develop a deeper appreciation of the cultural achievements of man. These socio-humanistic courses, recognized as fundamental background for the achievement of a full life are drawn from liberal arts, sciences, economics, sociology, fine and applied arts, and other sources.

College of Engineering

To prepare men for professional work in engineering and architecture and for responsible positions of a technical character in industry, commerce, and government, the College of Engineering at the Chicago Undergraduate Division provides training in the mathematical and engineering sciences and their applications to the design, construction, and operation of industrial plants, buldings and homes, and public and private works of all kinds.

The curricula in this college, though widely varied and specialized, are built on a general foundation of scientific facts and theories applicable to many different fields. Work in the classrooms, laboratories, shops, and drafting rooms is correlated by practical problems similar to those of practicing architects and engineers. The curricula in architecture in the College of Engineering are offered under the Department of Architecture and Art. A discussion of the curricula in architecture is presented following the curricula in engineering.

At the Chicago Undergraduate Division the first two years are offered in the fields of aeronautical engineering, ceramic engineering, civil engineering, electrical engineering, engineering physics, general engineering, industrial engineering, mechanical engineering, metallurgical engineering and mining engineering. Those few required courses which are not available here are properly noted.

Instruction is designed primarily to prepare the student to enter the College of Engineering on the Urbana campus of the University of Illinois to complete the courses leading to the degree.

Summary of Requirements for Graduation

Students in the College of Engineering who meet the University's general requirements with respect to registration, residence, and fees, and who maintain satisfactory scholastic records in this college, are awarded degrees appropriate to their curricula.

Each curriculum leads to the degree of Bachelor of Science and may ordinarily be completed in four years. A graduate of one curriculum ordinarily can qualify for another baccalaureate degree by doing a fifth year of work consisting of thirty to thirty-six semester hours, acceptable to the faculty of this college, providing plans have been made toward such an arrangement at the beginning of his third year.

A graduate of the College of Liberal Arts and Sciences, or any other college of equal standing, who has adequate training in mathematics, physics, and mechanics to enable him to begin the third year of a curriculum in the College of Engineering, can usually qualify for the degree of Bachelor of Science from this college by two and one-half years of work.

Nontechnical electives include all courses in the College of Liberal Arts and Sciences except those in mathematics, chemistry, and chemical engineering; all courses in the College of Commerce and Business Administration; Architecture 113; Art 111, 112, and 115. The student may petition to receive credit for other courses which conform to the objectives of what are known as the social-humanistic studies. It is expected that the student will consult with his departmental adviser when selecting his nontechnical electives.

Transfer students may substitute survey courses of nontechnical areas for their nontechnical electives, although circumstances may dictate some reduction in credit.

Departmental electives and technical options are restricted to courses of a technical character as listed under this classification by each department. Options are groups of related courses in a special field of subject matter.

Most of the curricula in the College of Engineering provide an opportunity for concentration of the student's effort in the senior year along lines of his particular interest, within the broad field of his chosen curriculum. This is accomplished by curriculum options, which are groups of subject-matter related to recognized fields of concentration in professional engineering practice.

Common Program for Freshmen

FIRST YEAR FIRST SEMESTER	
	17 OR 18 HOURS
Chem. 102 or 103—General Chemistry	3 or 4
G.E. 100—Engineering Lectures	0
G.E. 101—Elements of Drawing	3
Hygiene 101—Personal and Environmental Hygiene	2
Math. 123—Analytic Geometry	5
Rhet. 101—Rhetoric and Composition	3
Physical Education	1

SECOND SEMESTER	18 HOURS
Chem. 104—Chemistry of Metallic Elements	4
G.E. 102—Descriptive Geometry	3
Math. 133—Calculus	3
Physics 106—Mechanics	4
Rhet. 102—Rhetoric and Composition	3
Physical Education	1

Curriculum in Aeronautical Engineering

FIRST YEAR

Common Program for Freshmen (above).

SECOND YEAR FIRST SEMESTER	
	16 OR 17 HOURS
Math. 143—Calculus	5
M.E. 182—Manufacturing Processes	3
Physics 108—General Physics (Heat, Sound, Light, Modern Physics)	4
Modern History or Political Science	3 or 4
Physical Education	1

SECOND SEMESTER	16 OR 17 HOURS
Math. 345—Differential Equations and Orthogonal Functions	3
Physics 107—General Physics (Electricity, Magnetism, Modern Physics)	4
T.A.M. 156—Analytical Mechanics (Statics and Dynamics)	5
Modern History or Political Science	3 or 4
Physical Education	1

Curriculum in Ceramic Engineering

FIRST YEAR

Common Program for Freshmen (above).

SECOND YEAR FIRST SEMESTER	18 HOURS
Cer. E. 101—Introduction to Ceramic Engineering[1]	3
Chem. 123—Quantitative Analysis[2]	5
Math. 143—Calculus	5
Physics 107—Electricity and Magnetism, Modern Physics	4
Physical Education	1

SECOND SEMESTER	18 HOURS
Cer. E. 102—Ceramic Processes and Equipment[1]	3
Geol. 130—Mineralogy for Engineers[1]	3
Physics 108—Heat, Sound, Light	4
T.A.M. 154—Analytical Mechanics (Statics and Dynamics)	4
Technical or Nontechnical Electives	3
Physical Education	1

Curriculum in Chemical Engineering

This curriculum is administered by the College of Liberal Arts and Sciences. See pages 47 and 48.

Curriculum in Civil Engineering

FIRST YEAR

Common Program for Freshmen (page 38).

SECOND YEAR FIRST SEMESTER	17 HOURS
C.E. 105—Plane Surveying	2
C.E. 160—Building Construction	3
G.E. 111—Advanced Drafting for Civil Engineers	2
Math. 143—Calculus	5
Physics 107—Electricity and Magnetism, Modern Physics	4
Physical Education	1

SECOND SEMESTER	16 HOURS
C.E. 106—Surveying[1]	3
Geol. 150—Engineering Geology	3
Physics 108—Heat, Sound, Light	4
T.A.M. 750—Analytical Mechanics (Statics)	2
Nontechnical Electives	3
Physical Education	1

SUMMER

C.E. 207—Summer Surveying Camp 5

Curriculum in Electrical Engineering

FIRST YEAR

Common Program for Freshmen (page 38).

SECOND YEAR FIRST SEMESTER	16 HOURS
Econ. 108—Elements of Economics	3
Math. 143—Calculus	5
Physics 107—Electricity and Magnetism, Modern Physics	4
Speech 101—Principles of Effective Speaking	3
Physical Education	1

SECOND SEMESTER	16 HOURS
Econ. 248—Personnel Administration	3
E.E. 126—Electric Circuits and Fields	4
Physics 108—Heat, Sound, Light	4
T.A.M. 154—Analytical Mechanics (Statics and Dynamics)	4
Physical Education	1

Curriculum in Engineering Physics

The purpose of this curriculum is to prepare students for investigations in engineering problems calling for a knowledge of physics and mathematics or chemistry, and for positions in certain industries which prefer men with a thorough education in basic science.

Students in the engineering physics curriculum, when registering for ad-

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[1] Not offered at Chicago Undergraduate Division.

[2] Offered first semester only.

vanced undergraduate courses in physics at any stage in that curriculum, must have a grade average of at least 3.5 in all subjects, exclusive of the basic courses in military training and physical education, and a combined grade average of at least 3.5 in all courses in mathematics and physics taken prior to such registration. Transfer students must have a corresponding record in the institution from which they transfer, and must maintain such status at the University of Illinois.

Common Program for Freshmen (page 38).

(Substitution of Chem. 106 for Chem. 104 is advised).

SECOND YEAR FIRST SEMESTER 17 HOURS		SECOND SEMESTER 16 HOURS	
German or Nontechnical Electives[1]	4	German or Nontechnical Electives[1]	4
Math. 143—Calculus	5	Math. 343—Advanced Calculus[2]	3
Physics 107—Electricity and Magnetism, Modern Physics	4	Physics 108—Heat, Sound, Light	4
Nontechnical Electives[1]	3	Physics 341—Electricity and Magnetism	4
Physical Education	1	Physical Education	1

Curriculum in General Engineering

This curriculum provides a fundamental engineering training with moderate emphasis on design and a fixed requirement of fifteen hours in economics, corporation finance, engineering law, and labor problems. Specialization in any field of the student's choice is permitted in the liberal provisions for elective studies, as well as an option by means of which he may elect either structural or machine design. The curriculum is intended for students who do not wish to pursue the more specialized engineering curricula, but who wish to ally themselves with industrial and commercial development in the fields of management, operation, and construction—preparation for which is founded on scientific and engineering facts and disciplines, supplemented by economic and social orientations. A sales engineering option can be readily planned within the elective framework of the curriculum.

FIRST YEAR

Common Program for Freshmen (page 38).

SECOND YEAR FIRST SEMESTER 16 HOURS		SECOND SEMESTER 16 HOURS	
Econ. 108—Elements of Economics	3	C. E. 115—General Surveying	3
Math. 143—Calculus	5	Physics 108—General Physics (Heat, Sound, Light, Modern Physics)	4
M.E. 182—Manufacturing Processes	3	Speech 101—Principles of Effective Speaking	3
Physics 107—General Physics (Electricity, Magnetism, Modern Physics)	4	T.A.M. 156—Statics and Dynamics	5
Physical Education	1	Physical Education	1

Curriculum in Industrial Engineering

FIRST YEAR

Common Program for Freshmen (page 38).

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[1] It is suggested that the nontechnical electives be chosen from the social sciences (i.e., anthropology, history, political science, psychology, and sociology) or the humanities (i.e., art, classics, English, humanities, music, and philosophy).

[2] Mathematics 341 may be substituted for Mathematics 343.

SECOND YEAR FIRST SEMESTER	18 HOURS
Econ. 108—Elements of Economics	3
Math. 143—Calculus	5
M.E. 183—Materials Casting, or M.E. 184—Metal Processing	3
Physics 108—Electricity and Magnetism, Modern Physics	4
T.A.M. 150—Analytical Mechanics (Statics)	2
Physical Education	1

SECOND SEMESTER	18 HOURS
G.E. 112—Advanced Drafting for Mechanical Engineers[1]	2
M.E. 184—Metal Processing, or M.E. 183—Materials Casting	3
Physics 107—Heat, Sound, Light	4
T.A.M. 211—Analytical Mechanics (Dynamics)	3
T.A.M. 221—Resistance of Materials	3
Nontechnical Electives	2
Physical Education	1

Curriculum in Mechanical Engineering

FIRST YEAR

Common Program for Freshmen (page 38).

SECOND YEAR FIRST SEMESTER	18 HOURS
Econ. 108—Elements of Economics	3
Math. 143—Calculus	5
M.E. 183—Materials Casting, or M.E. 184—Metal Processing	3
Physics 108—Electricity and Magnetism, Modern Physics	4
T.A.M. 150—Analytical Mechanics (Statics)	2
Physical Education	1

SECOND SEMESTER	18 HOURS
G.E. 112—Advanced Drafting for Mechanical Engineer[1]	2
M.E. 184—Metal Processing, or M.E. 183—Materials Casting	3
Physics 107—Heat, Sound, Light	4
T.A.M. 211—Analytical Mechanics (Dynamics)	3
T.A.M. 221—Resistance of Materials	3
Nontechnical Electives	2
Physical Education	1

Curriculum in Metallurgical Engineering

FIRST YEAR

Common Program for Freshmen (page 38).

SECOND YEAR FIRST SEMESTER	18 HOURS
Chem. 123—Quantitative Analysis[1]	5
Math. 143—Calculus	5
Physics 107—Electricity and Magnetism, Modern Physics	4
Nontechnical Electives	3
Physical Education	1

SECOND SEMESTER	15 HOURS
Cer. E. 221—Pyrometry[2]	2
Met. E. 201—Principles of Physical Metallurgy[2]	3
Met. E. 203—Principles of Physical Metallurgy Laboratory[2]	1
Physics 108—Heat, Sound, Light	4
T.A.M. 154—Analytical Mechanics (Statics and Dynamics)	4
Nontechnical Electives	3
Physical Education	1

Architecture and Art

Offered under the College of Engineering.

Architecture is a five-year course offered with two optional curricula. The general option offers advanced work in the design and planning of larger projects and the engineering option emphasizes structural design and theory. Both options lead to the degree of bachelor of architecture. The work in the first year is identical and the student makes his choice between the general option and the engineering option at the beginning of the second year. The engineering option requires calculus and more advanced theoretical and applied mechanics.

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[1] Offered first semester only.

[2] Not offered at Chicago Undergraduate Division 1956.

The general option in architecture contains a well-balanced program of creative and technical training. Together with the necessary practical experience, it prepares the student for State Professional Registration. The engineering option, likewise, prepares the student for registration, but it offers advanced study in structure in place of architectural design in the last year and qualifies the student in the field of architectural engineering.

Both options include general studies in the humanities and the social and physical sciences necessary for the understanding and appreciation of better environment.

The department of architecture offers excellent facilities in lecture, drafting, and class rooms. There is a departmental library of nearly 10,000 volumes, over 10,000 slides, and innumerable magazines, pamphlets, and graphic materials.

Since the Undergraduate Division is located in Chicago, the department has numerous opportunities to present outstanding architects, professional lecturers, and inspection trips to museums, galleries, and various types of buildings under construction.

The courses offered in art are primarily designed for the architectural curriculum. Courses in history and appreciation of art are provided for students registered in other colleges of the University.

Electives

Electives provided in the two architectural curricula may consist of any courses given in the University not required in the curricula, not paralleling the subject matter of required courses, and not open to freshmen. The following, which are open to freshmen, are also acceptable as electives: History 111, 112, 131; Botany 100, 101; Geography 101, 104, 105; Geology 101; Biology 101; Speech 101, 141; English 111, 112; Accountancy 101. Courses with prerequisite of sophomore standing which are acceptable as electives include Rhetoric 152; Economics 108; English 131; Political Science 150, 151, and Sociology 100.

Curriculum in Architecture (Five Years)

FIRST YEAR FIRST SEMESTER 15 HOURS	
Art 181—Freehand Drawing	2
G.E. 107—Architectural Projections	2
Hygiene 101—Personal and Environmental Hygiene, or Hygiene 104—Personal and Community Health	2
Math. 112—College Algebra	3
Math. 114—Trigonometry	2
Rhet. 101—Rhetoric and Composition	3
Physical Education	1

SECOND SEMESTER 16 HOURS	
Arch. 101—Introduction to Architecture	3
Art 182—Freehand Drawing	2
G.E. 108—Architectural Projections	2
Math. 123—Analytic Geometry	5
Rhet. 102—Rhetoric and Composition	3
Physical Education	1

SECOND YEAR FIRST SEMESTER 16 HOURS	
Arch. 131—Architectural Design	3
Arch. 141—Materials and Methods of Construction I	2
Art 183—Freehand Drawing	2
Physics 101—General Physics	5
Elective	3
Physical Education	1

SECOND SEMESTER 16 HOURS	
Arch. 113—History of Ancient Architecture	2
Arch. 132—Architectural Design	3
Arch. 142—Materials and Methods of Construction II	2
Art 184—Freehand Drawing	2
T.A.M. 171—Elementary Mechanics	3
Electives	3
Physical Education	1

Curriculum in Architectural Engineering (Five Years)

FIRST YEAR

Common Program for Freshmen (page 38).

SECOND YEAR FIRST SEMESTER	16 HOURS
Arch. 131—Architectural Design	3
Arch. 141—Materials and Methods of Construction I	2
Art 183—Freehand Drawing	2
Math. 133—Calculus	3
Physics 101—General Physics	5
Physical Education	1

SECOND SEMESTER	17 HOURS
Arch. 113—History of Ancient Architecture	2
Arch. 132—Architectural Design	3
Arch. 142—Materials and Methods of Construction II	2
Art 184—Freehand Drawing	2
Math 143—Calculus	5
T.A.M. 150—Analytical Mechanics	2
Physical Education	1

College of Liberal Arts and Sciences

The College of Liberal Arts and Sciences at the Chicago Undergraduate Division offers the first two years of work in the several professional, pre-professional, and general curricula offered in this college at the Urbana campus. In all these curricula, the first two years are devoted to general basic education with increasing specialization in the last two years. A student who is not certain of his vocational objective at the time of his admission to college has an opportunity to do considerable educational exploration in his first two years and to change his vocational objective without additional time. Such a change after the beginning of the junior year usually can not be made without loss of time. It is assumed that upon completion of the two years' work in the Chicago Undergraduate Division students will transfer to the Urbana campus to continue in their chosen field at the junior level. Students desiring to transfer to institutions other than the Urbana campus of the University of Illinois should familiarize themselves with the requirements of the school of their choice so that they may plan their work most effectively while at the Chicago Undergraduate Division.

The following Liberal Arts and Sciences curricula are offered at the Chicago Undergraduate Division: general, chemistry, chemical engineering, pre-medicine, pre-dentistry, pre-nursing, teacher-education, pre-law, pre-veterinary medicine, pre-journalism, and one year of occupational therapy. Content of the courses closely parallels that given on the Urbana campus of the University of Illinois.

General Curriculum

All students who do not elect to follow one of the specialized curricula described below enroll in the general curriculum. The general curriculum requires a number of basic courses in literature or philosophy, social studies and natural sciences, and a reading knowledge of at least one foreign language. Each student must select a major and a minor or a split minor in the field of concentration the last two years.

Because of the wide range of courses open to students in the general curriculum, it is not feasible to specify definite sequences of courses to be taken by any student in each of the four years of this curriculum.

Under the guidance of an adviser, each student is expected to plan his own program within the general requirements outlined below. Students at the Chicago Undergraduate Division will find it to their advantage to complete the group requirements listed on pages 44 and 45 in their first four semesters in the University.

Summary of Requirements for Graduation

Each candidate for the degree of A.B. or B.S. in the general curriculum of Liberal Arts and Sciences must meet the following requirements:

Hygiene—Hygiene 101 or 104.

Physical Education — Four semesters.

Military Science—Four semesters, except that men transferring from the Chicago Undergraduate Division with sixty hours are exempt from this requirement.

Rhetoric—Rhetoric 101 and 102. (A student with "C" or "D" in Rhetoric 102 must pass qualifying examination or take Rhetoric 200.)

Foreign Language—Equivalent of two college years in same language.

U. S. History—One unit of American History in high school or History 151 and 152.

Mathematics—One unit of algebra and one unit of plane geometry in high school or Mathematics 101 and 102.

Biological Sciences[1]—Eight hours.

Physical Sciences[1]—Eight hours.

Humanities[1]—Eight hours.

Social Sciences[1]—Eight hours.

Major—Twenty approved hours in one department.

Minor(s) — Twenty approved hours in one or two departments.

Advanced hours—Thirty hours of credit in courses not open to freshmen and sophomore.

Residence — Either first ninety hours uninterrupted, or last thirty hours uninterrupted at the University of Illinois. For students at the Chicago Undergraduate Division, the junior or senior year (thirty semester hours) must be taken at Urbana.

Average—3.0 ("C") minimum average.

Total hours—120 hours, excluding basic military and all physical education courses, with not more than one quarter of the work with a grade of "D."

Required Subjects

1. **Foreign Language.** A reading knowledge of a foreign language (French, German, Greek, Italian, Latin, Portuguese, Russian, or Span-

[1] The eight hours must be taken in approved sequence.

Classes are kept small so that more individual attention may be afforded each student.

ish) equivalent to that resulting from four semesters of study of a foreign language commenced in college. To be begun in the first semester of the freshman year, except as otherwise provided, and to be continued until the requirement is completed. This requirement is satisfied by passing French 104, German 104 or 144, Greek 202, Italian 104, Latin 104 or 105, Portuguese 104, Russian 204, Spanish 104, or a more advanced course in any of these languages. Proficiency examinations are offered in French, German, and Spanish. Note: No credit toward graduation is given for a beginning course in a foreign language unless it is continued through a full year. Students planning to enter a graduate college are advised to obtain a reading knowledge of both French and German.

2. **Group Requirements.** To be begun in the freshman year and completed before the senior year. Students at the Chicago Undergraduate Division will find it to their advantage to complete these requirements by the end of their fourth semester. Proficiency examinations may be taken for credit in some of these subjects.

Basic Knowledge. From high school: one unit of American history or History 151 and 152; one unit of algebra and one unit of plane geometry or Mathematics 101 and 102.

General Education. An approved two-semester course or sequence of courses in each of the following areas, with a minimum of eight hours credit in each: (a) humanities, (b) biological sciences, (c) physical sciences, (d) social sciences.

Electives

1. **Liberal Arts and Sciences.** Any course offered in the College of Liberal Arts and Sciences may be used as an elective.

2. **Other Colleges.** Electives totaling as much as but not more than thirty-two hours may be taken in other colleges and schools of the University and counted toward graduation from this college, in addition to the courses acceptable for major and minor requirements, if such electives are in conformity with the following list approved by the faculty:

Accountancy. A total of 6 hours (including not more than one of the following courses: Accountancy 101, 102, 201).

Agricultural Economics. A total of 6 hours.

Architecture. A total of 15 hours.

Art. A total of 15 hours unless the student is majoring in history of art.

Aviation. A total of 3 hours.

Business Law. A total of 6 hours.

Economics. All courses.

Education. A total of 20 hours.

Engineering. A total of 10 hours.

Food Technology. A total of 6 hours.

Forestry. A total of 3 hours.

Home Economics. All courses.

Horticulture. A total of 6 hours.

Hygiene. Hygiene 101 or 104 (2 hours.)

Journalism. A total of 10 hours.

Landscape Architecture. A total of 7 hours.

Law. A student of senior standing with an average of 3.5 who has been in residence either the first two years or the last year of his pre-legal work may take and count toward the A.B. degree not to exceed 32 hours in the University of Illinois College of Law. A student of senior standing with an average of 3.5 who has completed his first three years (not less than 88 semester hours excluding basic military and physical education) in residence at the University of Illinois (a student at the Chicago Undergraduate Division must complete his junior year with at least 30 semester hours at Urbana) and who transfers to an accredited college of law other than that of the University of Illinois may count 32 hours of law toward the A.B. degree. The applicant for the degree will petition the dean of the College of Liberal Arts and Sciences, who may approve the granting of the bachelor's degree if all the college and university requirements have been met.

Library Science. A total of 20 hours.

Management and Marketing. A total of 6 hours. Typing, secretarial training, and shorthand may not be counted for credit.

Military Training. A total of 8 hours in advanced courses.

Music. A total of 15 hours approved by the Director of the School, unless the student is majoring in music.

Physics. All courses.

Chemistry and Chemical Engineering

The minimum language requirement for graduation in the following curricula in chemistry and chemical engineering is the equivalent of two years of college work in German or French. When a student does not offer either German or French for entrance, the second year of the language required for graduation may be counted as an elective in either curriculum.

Students who enter with inadequate preparation in chemistry, mathematics, and foreign languages in high school will find it difficult to complete their professional training in chemical engineering in four years. The optional five-year curriculum is recommended especially for those who do not qualify for Chemistry 107 and Mathematics 123, and who do not have two units of high school credit in French or German. Students should note that they must have a 3.5 general average for registration in these curricula after they have attained junior standing.

Curriculum in Chemistry

FIRST YEAR FIRST SEMESTER 17 HOURS	
Chem. 107—General Chemistry and Qualitative Analysis[1]	5
German or French	4
Math. 112—College Algebra	3
Math. 114—Trigonometry	2
Rhet. 101—Rhetoric and Composition	3
Physical Education	

SECOND SEMESTER 19 HOURS	
Chem. 108—General Chemistry and Qualitative Analysis	5
German or French	4
Math. 123—Analytic Geometry	5
Hygiene 101—Personal and Environmental Hygiene, or Hygiene 104—Personal and Community Health	2
Rhet. 102—Rhetoric and Composition	3
Physical Education	

SECOND YEAR FIRST SEMESTER 16 HOURS	
Chem. 124—Quantitative Analysis	5
Math. 133—Calculus	3
Physics 106—Mechanics	5
Physical Education	
Electives[2]	3

SECOND SEMESTER 17 or 18 HOURS	
Chem. 234—Organic Chemistry	5
Math. 143—Calculus	5
Physics 107—Electricity, Magnetism Modern Physics	5
Physical Education	
Electives[2]	2 or 3

Curriculum in Chemical Engineering (Four Years)

FIRST YEAR FIRST SEMESTER 18 HOURS	
Chem. 107—General Chemistry and Quantitative Analysis[1]	5
G. E. 101—Elements of Drawing	3
Hygiene 101—Personal and Environmental Hygiene, or Hygiene 104—Personal and Community Health	2
Math. 123—Analytic Geometry[3]	5
Rhet. 101—Rhetoric and Composition	3
Physical Education	

SECOND SEMESTER 15 to 18 HOURS	
Chem. 108—General Chemistry and Qualitative Analysis	5
Math. 133—Calculus	5
Physics 106—Mechanics	4
Rhet. 102—Rhetoric and Composition	3
Electives[2]	0 to 3
Physical Education	

[1] All students with entrance credit in chemistry are required to take a proficiency examination before registering for Chemistry 107. Those who do not show the necessary proficiency will be placed in Chemistry 101 or 102, after which they will take Chemistry 106 and 110. For students without entrance credit in chemistry, the required sequence is Chemistry 101, 106, and 110.

[2] Suggested courses for electives are Biology 101, 111, 121, 131, 132; English 121, 122, 123; Geology 130, 150; History 151, 152; German or French. Of the total electives for graduation, at least twelve hours should be from advanced courses in chemistry and at least ten hours from courses offered by other departments.

[3] Students without the required entrance credits in mathematics take Mathematics 112 (or 111), 114, 123, 133, and 143.

SECOND YEAR FIRST SEMESTER	18 HOURS
Chem. 124—Quantitative Analysis	5
German or French[1]	4
Math. 143—Calculus	5
Physics 107—Electricity, Magnetism, Modern Physics	4
Physical Education	

SECOND SEMESTER	17 HOURS
Chem. 240—Elementary Physical Chemistry[2]	5
Chem. 241—Elementary Physical Chemistry Laboratory[2]	1
German or French[1]	4
Physics 108—Heat, Sound, Light	4
T.A.M. 150—Analytical Mechanics (Statics)	2
Physical Education	
Electives[3]	3

Optional Curriculum in Chemical Engineering (Five Years)

FIRST YEAR FIRST SEMESTER	15 to 17 HOURS
Chem. 101 or 102—General Chemistry[4]	5 or 3
German or French	4
Math. 112—College Algebra	3
Math. 114—Trigonometry	2
Rhet. 101—Rhetoric and Composition	3
Physical Education	

SECOND SEMESTER	19 HOURS
Chem. 106—Inorganic Chemistry	5
German or French	4
Hygiene 101—Personal and Environmental Hygiene, or Hygiene 104—Personal and Community Health	2
Math. 123—Analytic Geometry	5
Rhet. 102—Rhetoric and Composition	3
Physical Education	

SECOND YEAR FIRST SEMESTER	17 HOURS
Chem. 110—Qualitative Analysis	5
German or French	4
Math. 133—Calculus	3
Physics 106—Mechanics	5
Physical Education	

SECOND SEMESTER	18 HOURS
Chem. 124—Quantitative Analysis	5
German or French	4
Physics 107—Electricity, Magnetism, Modern Physics	4
Math. 143—Calculus	5
Physical Education	

Curriculum in Physics

The curriculum in physics is recommended for students who plan to enter graduate study in physics or who wish to prepare to enter government or industrial laboratory research positions upon attaining the B.S. degree. It specifies the courses essential to a strong foundation in physics and permits concentration in the first two years on basic courses which are prerequisite to advanced courses in physics and mathematics.

It is planned for a student entering with four years of high school mathematics, including trigonometry (see, however, footnote 1 following curriculum), a year of chemistry and no French or German. A student who can satisfy the college language requirement on entering has the distinct

[1] Two years of French and/or German are required for the B.S. degree. Two units of high school credit in either of these languages is equivalent to one year of college credit. Students entering without German or French in high school may substitute the second year of the language requirement for the six hours of electives referred to in footnote 3.

[2] Not given at Chicago Undergraduate Division.

[3] Six hours of electives must be chosen from the Divisions of Humanities or Social Sciences with the approval of the adviser. The courses are intended to broaden the engineer and provide an interest and liberal education in history, language, literature, philosophy, political science, or public speaking.

[4] Students who qualify for Chemistry 107 should take the Chemistry 107, 108, 124, 240 sequence rather than Chemistry 101, 106, 110, 124 and thus have five additional hours of advanced electives.

[5] For students who do not start with Math. 123, the required sequence is Math. 112 (or 111), and then Math. 123.

advantage of adding 16 hours of electives to his course of study. A student who has a year of high school biology will also have more freedom in choice of electives (see footnote 4 following curriculum).

To enter the physics curriculum, an entering freshman must rank in the upper half of his high school class. To be permitted to register in advanced physics or mathematics courses in this curriculum students must have a grade average of at least 3.5 in all subjects, exclusive of the basic courses in military science and physical education, and a combined grade average of at least 3.5 in all courses completed in physics and mathematics. Transfer students must have a corresponding record in the institution from which they transfer.

FIRST YEAR	FIRST SEMESTER	16 HOURS
Math. 123—Analytic Geometry[1]		5
Chem. 103—General Chemistry[2]		4
German or French[3]		4
Rhet. 101—Rhetoric and Composition		3
Physical Education		

SECOND SEMESTER	16 HOURS
Math. 133—Calculus[1]	3
Chem. 104—Chemistry of the Metallic Elements[2]	4
German or French[3]	4
Rhet. 102—Rhetoric and Composition	3
Hygiene 101—Health Lectures	2
Physical Education	

SECOND YEAR	17 HOURS
Math. 143—Calculus[1]	5
Physics 106—General Physics	4
German or French[3]	4
Elective[4]	4
Physical Education	

SECOND SEMESTER	15 HOURS
Math. 345—Differential Equations and Orthogonal Functions	3
Physics 107—General Physics	4
German or French[3]	4
Elective[4]	4
Physical Education	

Pre-medical Curriculum

Any freshman whose scholastic rank is in the upper half of his high school graduating class, on matriculating in the College of Liberal Arts

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[1] The prerequisite to entering the stated sequence in mathematics is three to four years of high school mathematics, including trigonometry, and a satisfactory grade on the mathematics placement examination. Students having college credit for algebra and trigonometry are not required to take the examination. A student who does not meet the above prerequisite may meet the requirements in basic mathematics with the sequence Math. 112, 114, 122, 133, 143. A student who has completed Math. 117, 127, 137, 147, (15 hours) before entering the curriculum will have satisfied the basic mathematics requirements. For either of these sequences he will receive only 13 hours credit toward the degree.

[2] The chemistry requirement may be satisfied by a year of general chemistry selected from courses Chem. 101 through 108, or by the one-semester course, Chem. 109. A maximum of eight hours in general chemistry will be counted toward the degree, except that ten hours will be allowed for Chem. 107 and 108.

[3] The language requirement is a reading knowledge of German or French. A student planning to enter graduate study should attain a reading knowledge of both German and French.

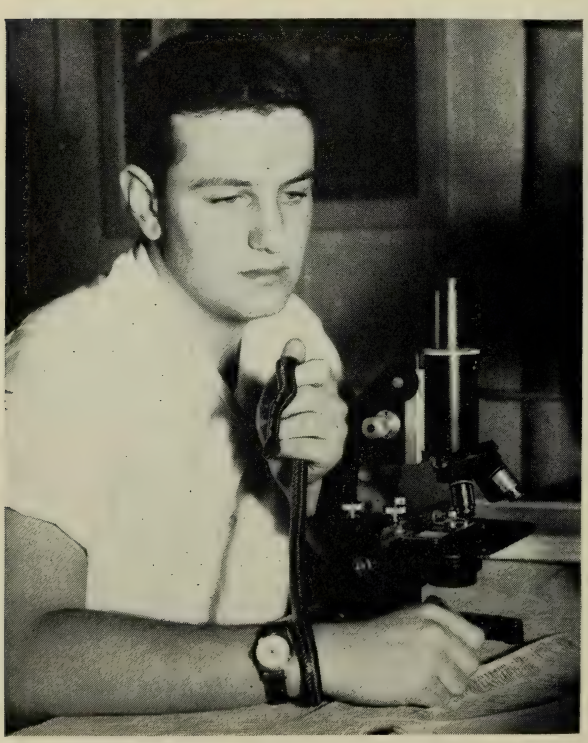
[4] The elective subjects must include at least 24 hours of course work in humanities, social sciences, and biological sciences. The courses must satisfy the general education requirements of the college, except that students offering one unit or more of biology for admission may substitute additional courses in humanities and social sciences for biological sciences. Students will be advised to include six to eight hours of physics and three to six hours of mathematics among the remaining electives.

and Sciences, is eligible for admission to the pre-medical curriculum. Pre-medical students must maintain a 3.5 average, or they will be transferred to the general curriculum. A student transferring to this college with advanced standing must meet the scholastic requirements at the level at which he transfers, in terms of the University's grading system, in order to be admitted to the pre-medical curriculum.

Other factors being equal, students at the University of Illinois who have completed the pre-medical curriculum with an average of 4.3 or better, will be given preferential consideration by the Committee on Admissions, provided that at least the second and third years have been done within the University.

The specific requirements for admission to the College of Medicine at the University of Illinois are as follows:

	SEMESTER HOURS
Non-science Courses (32 semester hours required)	
English	6
Foreign Language	6
Social Science and Humanities (at least three hours from each area)	16
Electives	4
Laboratory Sciences (32 semester hours required)	
Biology (including laboratory courses in general and vertebrate zoology or comparative anatomy and in embryology)	10
Chemistry (including in addition to introductory courses, four hours of organic chemistry and three hours of quantitative analysis)	14
Physics (including laboratory work in mechanics, heat, sound, light, and electricity)	8
Free Electives	24
Total	88



Students have the most modern, up-to-date equipment and facilities in more than 30 laboratories.

Pre-dental Curriculum

Students applying for admission to the pre-dental curriculum must have ranked in the upper half of their high school graduating class. They must maintain at all times in the curriculum a minimum average of 3.5. The work covered by the first two years of the pre-medical curriculum enables students to meet the requirements for admission to the University of Illinois College of Dentistry. Since the function of the pre-dental years is to supply a general background for the student as well as specific training in the fundamental concepts of the sciences, it is recommended that the elective hours also include history, economics, sociology, philosophy, and at least one modern language.

The specific requirements for admission to the College of Dentistry are as follows:

	SEMESTER HOURS
Chemistry (including three hours of quantitive analysis and four hours of organic chemistry—Chemistry 101 or 102, 105, 122, and 133)	12
Physics (Physics 101 and 102)	6
Biology (including general zoology[1])	6
Rhetoric and Composition (Rhetoric 101 and 102)	6
Electives (including history, economics, sociology, philosophy, and at least one modern language; excluding military, hygiene, and physical education)	30
Total	60

Pre-dental students who wish to be candidates for the degree of Bachelor of Science in Dentistry on the completion of the second year in the College of Dentistry should consult the College Catalog.

Curriculum in Nursing

The University offers a four-year collegiate program leading to the degree of Bachelor of Science in Nursing. The pre-professional curriculum, administered in Liberal Arts and Sciences, requires a minimum of one year and the satisfaction of the following requirements:

	SEMESTER HOURS
Physical Education	2
Rhet., 101, 102	6
Chem. 102 (or 101), 132	6-8
Biology 101	4
Humanities	6-8
Social Science	6-8
Electives	
Total	32

The professional curriculum is given by the School of Nursing at the Chicago Prefessional campus of the University and requires at least eleven quarters of work. Admission to the professional curriculum is on recommendation of an admissions committee, but consideration by the committee requires a 3.0 average in pre-professional work and grades of at least "C" in chemistry and biology.

[1] The general zoology requirement may be met by Biology 101 and 131, or Biology 101 with a grade of "B."

Continuation Program in Nursing

This program leads to the degree of Bachelor of Science in Nursing, which is conferred by the School of Nursing. It is open to holders of the Diploma in Nursing conferred by a school of nursing accredited by the licensing body of the state in which it is located.

The program consists of four semesters plus one summer session or half semester of eight weeks. The first two semesters are in the College of Liberal Arts and Sciences, either at Urbana or at the Chicago Undergraduate Division, the third semester in the college of Liberal Arts and Sciences at Urbana, the remainder in the University of Illinois School of Nursing, with residence as indicated.

Requirements for Admission

Candidates apply to the College of Liberal Arts and Sciences for admission to the program, which is granted upon fulfillment of the following conditions:

1. Certification by the University of Illinois School of Nursing that the candidate holds the Diploma in Nursing from a school of nursing accredited by the licensing body of the state in which it is located.

2. Licensure to practice professional nursing within one of the forty-eight states or a territory of the United States (new graduates must pass the state board licensing examination within one year of graduation).

3. Satisfaction of the requirements for admission to the general curriculum in the College of Liberal Arts and Sciences.

4. Certification by the University of Illinois School of Nursing that the candidate has achieved on the Graduate Nurse Test Battery of the National League for Nursing a score not lower than 1½ s.d. below the mean of collegiate norms for each of the clinical fields. This certification entitles the candidate to a block credit of forty semester hours in clinical nursing.

5. Certification by the University of Illinois School of Nursing that the candidate has passed examinations as set by the National League for Nursing for advanced standing in microbiology (four semester hours) and anatomy and physiology (five semester hours).

6. Passing of examinations for advanced standing in rhetoric and composition (six semester hours) administered by the appropriate department of the College of Liberal Arts and Sciences.

7. Failure to demonstrate proficiency in any or all of the fields listed under paragraphs 5 and 6 does not preclude admission to the Continuation Program, but requires adding to the candidate's program appropriate courses in the subjects indicated. Courses taken for making up such deficiencies do not in any case count as electives within the sixty semester hours of the Continuation Program.

8. Failure to demonstrate proficiency in not more than two of the six

clinical fields indicated in paragraph 4 does not preclude admission to the Continuation Program but requires the candidate to supplement her clinical education by supplementary courses and/or experience approved by the faculty of the University of Illinois School of Nursing and re-examination in that clinical field or fields. No portion of the block credit of forty semester hours in clinical nursing is granted until this deficiency is removed.

Requirements for Graduation

Each candidate for the degree must earn 120 semester hours including thirty hours of advanced work done in residence. Fifty-five of these hours must be those specified in paragraphs 4, 5, and 6 under Requirements for Admission. The remaining sixty-five hours, constituting the Continuation Program proper, must be passed with an over-all average of 3.0, and shall be made up as follows, subject to such rearrangement of courses or lengthening of the period of study as may be required because of entrance deficiencies, which should be removed within the first year.

FIRST YEAR — FIRST SEMESTER	HOURS	SECOND SEMESTER	HOURS
Chem. 102—General Chemistry	3	Chem. 132	3
Physics 105—Nurses' Physics	4	Psych. 150—Personality and Human Relations	3
Humanities	4	Humanities	4
Electives	4-6	Electives	5-7

SECOND YEAR — FIRST SEMESTER (URBANA) — HOURS

Ed. 211—Educational Psychology 3
Phil. 105—Moral Ideas and Practice 2
Social Sciences ..... 6 or 9
- For students electing Community Nursing:
  - Psych. 216—Child Psychology 3
  - Sociol. 220—Marriage and the Family 3
  - Sociol. 276—Sociology of the City, or Sociol. 277—Rural Social Problems 3
- For students electing Institutional Nursing:
  - Psych. 250—Psychology of Personality 3
  - Psych. 255—Social Psychology, or Psych. 338—Abnormal Psychology, or Sociol. 212—Culture Patterns and the individual 3

Electives (other courses in social sciences, or courses in the biological sciences, or other courses with permission of the Director of the School of Nursing, to total at least 15 hours)

SECOND YEAR — SECOND SEMESTER (URBANA OR CHICAGO)

Students transfer to the University of Illinois School of Nursing as candidates for the degree of Bachelor of Science in Nursing. Courses in this group will be offered alternately at the Chicago Professional Colleges and on the Urbana campus, if registration warrants.

Nursing 200—Principles of Health Teaching 2
Nursing 301—Introduction to Community Nursing (for students electing Community Nursing), or Nursing 300—Introduction to Management in Nursing (for students electing Institutional Nursing) 3
Nursing 302—Seminar in Trends and Problems in Nursing Services 3
Electives (as required to bring total credit hours to 116 in this semester; minimum, 3 hours)

SUMMER SESSION OR HALF SEMESTER

Nursing 311—Field Practice in Community Nursing (for students electing Community Nursing), or Nursing 310—Field Practice in Management Nursing (for students electing Institutional Nursing) 4

Pre-veterinary Curriculum

The two-year pre-veterinary curriculum in the College of Liberal Arts and Sciences is followed by the four-year curriculum in the College of Veterinary Medicine in Urbana. Students applying for admission to the

pre-veterinary curriculum must rank in the upper half of their high school graduating class. Students transferring with advanced standing must have maintained at least a 3.5 average in terms of the University's grading system. Students must maintain at least a 3.5 average to remain in the curriculum.

The specific requirements for admission to the College of Veterinary Medicine at Urbana are as follows:

	SEMESTER HOURS
Chemistry (including organic and quantitative analysis—Chemistry 101 or 102, 105, 122, and 133)	16
Biological Sciences[1] (including botany and general zoology)	8
Physics (including laboratory—Physics 101 and 102)	8
Foreign Language	6
Rhetoric and Composition (Rhetoric 101 and 102)	6
Electives in not less than two of the following fields: economics, fine arts, language, geography, history, literature, philosophy, political science, psychology, sociology, speech. Approximately one-half of these credits should be in social sciences	9
Free electives	7
Total	60

The pre-veterinary curriculum is extremely rigid and failure to register in the prescribed courses in the proper sequence may result in an additional semester of study.

Pre-law Curriculum

The pre-legal courses constitute a highly important phase of the education of students planning the study of law, and this work should be planned with care. Students contemplating the study of law are advised to consult with the Student Counseling Bureau at the Chicago Undergraduate Division relative to their interests and aptitudes for law.

Students taking the curriculum leading toward degrees in both liberal arts and law comply with the graduation requirements in the general curriculum. Such students are urged to complete all of these requirements before entering the College of Law except the minor and advanced hours. The prospective law student is advised to choose his work, beyond those subjects prescribed in liberal arts, from among the following fields: English, with special emphasis on rhetoric and speech; political science; history, with emphasis on American and English constitutional history; economics; philosophy, and particularly logic; Latin; psychology; sociology; mathematics; and accountancy.

Home Economics Curriculum

Students planning to major in home economics may profitably attend the Chicago Undergraduate Division for one year. Courses for the freshman program in home economics should be chosen only after consultation with the Dean of the College of Liberal Arts and Sciences.

[1] The biological sciences requirement may be met by Biology 101 and 131.

Teacher Education Curricula

Of the curricula in teacher education which have been approved by the College of Liberal Arts and Sciences, preliminary work in thirteen curricula is offered at the Chicago Undergraduate Division as follows: biology, chemistry, English, French, geography, German, mathematics, mathematics and physical sciences, physics, social studies, Spanish, speech, and speech correction. In order to meet graduation and state certification requirements, these curricula are relatively rigid and failure to take the prescribed courses of the first two years within that time may result in an additional semester of undergraduate work.

While these curricula vary considerably from one another, the common core of the first two years is as follows:

	FIRST YEAR SEMESTER HOURS	SECOND YEAR SEMESTER HOURS
Physical Education	2	2
Hygiene 101 or 104	2	
Rhetoric 101, 102	6	
Speech 101	3	
Foreign Language (until a 104 course is completed)	8	8
Science	6-8	
English or Social Studies as required		6-8
Specific requirements, Education 101, History 152, Political Science 150, Psychology 100		12
Work in major teaching field and electives	3-7	4-6
Total	32-34	32-34

The first two years of the elementary education curriculum, which is designed to meet the requirements for teaching in the elementary and kindergarten-primary grades of Illinois schools, are also administered by this college.

The work of the first two years in this curriculum has the following pattern:

	FIRST YEAR SEMESTER HOURS	SECOND YEAR SEMESTER HOURS
Physical Education	2	2
Hygiene 101 or 104	2	
Rhetoric 101, 102	6	
Speech	2-3	
Language arts	6-8	
Science, biological and physical	8	8
Social Studies	8	
Specific requirements, Education 101, Geography 104, History 152, Political Science 150, Psychology 100		15
Electives		7-9
Total	34-36	32-34

Admission to the curricula preparatory to teaching deaf and hard-of-hearing children and mentally handicapped children requires the meeting of qualitative and physical requirements and a personal interview. The determination of courses will be made with a teacher education advisor.

Pre-journalism Curriculum

Students planning to enter the School of Journalism and Communications register as pre-journalism freshmen and sophomores following the general curriculum in the College of Liberal Arts and Sciences. Courses in English literature and rhetoric, foreign languages, physical sciences, and social studies are recommended as desirable preparation for the profession of journalism. The ability to use a typewriter should be acquired before entering this school.

For admission to the School of Journalism and Communications as a candidate for a degree, a student must have completed fifty-six semester hours of work in one of the undergraduate curricula, exclusive of required courses in physical education and military training, with an average grade of 3.5 (one-half of the college work with an average grade of "B" and one-half with an average grade of "C"). An applicant for admission will find it to his advantage to include in his pre-journalism curriculum at least six hours of rhetoric and composition, twelve hours of history, political science, economics, and sociology, and ten hours of science, including mathematics.

The School of Journalism and Communications offers the following curricula: editorial, advertising, publication management, and radio-television.

The school's gymnasium, largest playing floor in the state, houses all physical education classes for men as well as the intramural and varsity program.

School of Physical Education

All students entering the University as freshmen are required to obtain four hours of credit in physical education. Each student is given a health examination and a motor fitness test before registration. The findings by the Health Service and the testing division are used as a basis for prescribing each student's immediate physical education program. Students with handicapping physical defects are assigned to prescribed activities. Students with low scores in motor fitness are assigned to basic physical fitness courses.

Students who are organically sound and demonstrate a fair degree of motor fitness are permitted to elect from a variety of activity courses. All general courses in physical education meet three times a week for one hour or two times a week for one and one-half hours. All general courses in physical education carry one hour of credit.

Women students entering the University as freshmen are required to obtain credit for four semester hours of work in physical education; those entering the University with sophomore standing are required to obtain credit for two semesters of work in physical education. Women are offered instruction in elementary and intermediate rhythms, ballroom dance, individual gymnastics, basketball, volleyball, softball, badminton, tumbling, apparatus stunts, fundamentals of motor fitness, archery, games for school and playground, folk and square dance, boating and fishing, swimming, golf, and bowling. Women's physical education classes are held in the Auditorium at the east end of the Pier. Through the Women's Athletic Association and Orchesis, the modern dance group, women students are offered wide opportunities for extra-curricular activities in sports and the dance.

Men students entering the University with less than sixty semester hours credit are required to secure four semesters of credit in physical education, including the amount transferred. In addition to intercollegiate and intramural athletics, men students in the physical education classes are offered instruction in volleyball, badminton, swimming, individual tumbling, double tumbling, apparatus stunts, boxing, wrestling, weight lifting, archery, boating and fishing, personal defense activities, and a basic physical fitness program.

Veteran students who have fulfilled the four-hour physical education requirement while in the service are exempt from taking physical education. Veterans are encouraged to utilize the physical education facilities, but additional credit will not be granted except as elective credit in the College of Commerce and Business Administration.

In addition to the service program, the Physical Education Department offers the first two years of the professional training curricula leading to the degrees of Bachelor of Science in Physical Education, in Health Education, in Recreation, and in Dance. Complete information concerning the professional training curricula is available at the office of the Director of Physical Education.

Army Reserve Officers' Training Corps

Authorization

The Reserve Officers' Training Corps (R.O.T.C.) is organized under authority of the Act of Congress of June 3, 1916, and was activated at the University of Illinois, Chicago Undergraduate Division, in September, 1950.

Educational Aim

The fundamental educational aim of the R.O.T.C. is to make the student conscious of his duties and responsibilities to his government as a citizen of this nation and, to so prepare him, that in time of national emergency he can fulfill his responsibility in accordance with his training and capabilities.

The broad aspects of the military training program gives the student a training which is as valuable to him in his civilian career as it is in his service to his country in time of emergency. The program offers a wide variety of work that is fundamental in nature. It should instill in the student an indelible impression of the place of the armed forces in the American democracy, and of the extent to which our military organization is dependent on the productive capacity of the nation.

Physical Training

A military unit is largely dependent for its efficiency upon the physical fitness of the individuals composing it. Therefore, it is the policy to encourage and support the physical training given by civilian instructors.

Participation

The R.O.T.C. course is offered to qualified male students on a volunteer basis. Qaulifications for enrollment in the R.O.T.C. are that the student be regularly enrolled in the University, be a citizen of the United States, be within specified age limits, be physically qualified, and be approved by the Professor of Military Science and Tactics.

Program of Instruction

College level R.O.T.C. instruction is divided into two parts: the basic course, which comprises the first two years of the program, and the advanced course, comprising the last two years of the program. Only the first three years of this program are offered at the Chicago Undergraduate Division.

Basic Course

The first two years of military training are designated as the basic course. Students in the basic course will devote three hours a week to military instruction which will consist of two hours of classroom instruction and one hour of drill. Accreditation for the basic course is one hour each semester. A student entering the University of Illinois after successfully completing military training at a high school or preparatory school which has an accredited Junior Division R.O.T.C. program will be entitled, upon enrollment, to such credit as may be determined by the Professor of Military Science and Tactics. In no case will this credit exceed the first year of the basic course. Students intending to enroll in the basic course must not have reached the age of twenty-three at the time of enrollment.

Advanced Course

The advanced course of the R.O.T.C. leads to a Reserve or Regular commission in the Army. The first year of advanced course training in Infantry is offered to students who have successfully completed the two-year basic course or to veterans of the Army, Air Force, Navy, and Marine Corps who have completed one year of active service in the Armed Forces and have been honorably discharged. Students enrolling initially in the advanced course must not have reached their twenty-seventh birthday at the time of enrollment. Any student desiring entrance into the advanced course must be prepared to complete the

course. The objective of the advanced course is to produce college-trained junior officers to meet the needs of the Army Reserve, National Guard, and Regular units.

The advanced course consists of five hours of instruction each week four hours of which is classroom instruction and one hour of drill. Accreditation for the advanced course is three credit hours each semester. All candidates for a Reserve commission must have reached an age of not less than twenty-one years, completed four years of education at college or university level, and successfully completed the advanced course which includes a summer encampment. The encampment is of approximately six weeks duration and is usually held at the end of the first year of the advanced course. Students completing all requirements for a Reserve commission, but who have not reached the age of twenty-one will be given a certificate of capacity and a temporary commission and will receive the Reserve Officer Commission shortly after their twenty-first birthday. Those with distinguished records in R.O.T.C. are selected for consideration for Regular commission in the Army.

All members of the advanced course will receive the following: monetary allowance in lieu of subsistence, officer-type uniform, the pay of the first enlisted grade while at the advanced summer encampment, and all necessary texts and materials on a loan basis.

Deferment from Selective Service

Deferment from Selective Service is granted for completion of the four-year course to those students who are qualified and approved by a deferment board composed of military and civilian faculty personnel. Deferred students will retain their deferment throughout their course in military, provided they maintain the required standards.

Clothing and Equipment

All students enrolled in the R.O.T.C., including the basic course, receive an Army officer-type uniform and textbooks at government expense. Equipment and supplies are provided on a loan basis and must be returned at the close of the school year. A deposit of $10 is required prior to the issue of equipment. This deposit, through the Military Property Custodian, is refundable at the close of the school year.

UIC has a complete library containing more than 80,000 reference, bound periodicals and fiction volumes.

Courses of Instruction

Accountancy

101. Principles of Accounting. Simple transactions, general ledger accounts, books of original entry, closing process, trial balances, financial statements, accounting for negotiable instruments, controlling accounts, adjusting entries. I, II; 3. Students with 95 or more credit hours receive only 2 hours credit.

105. Accounting Procedure. Relation of business documents to the accounts; fundamentals of partnership and corporation accounting; business forms and records; payroll accounting; single entry; financial statement analysis. I, II; 3. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: Accountancy 101.

106. Elementary Cost Accounting. Accounting for production management. Principles and methods of accounting for managerial control of costs of production. I, II; 3. Prerequisite: One year of accountancy; sophomore standing.

108. Intermediate Accounting. Consideration at the intermediate level of accounts and transactions peculiar to the partnership and corporation types of organization and of modern basic concepts of accounting theory; interpretation of financial statements and analysis of the principal accounts represented therein. I, II; 3. Prerequisite: One year of accountancy; sophomore standing.

Architecture

101. Introduction to Architecture. Introduction to the building industry and the profession of architecture, exercises illustrating basic architectural forms and their organization. I, II; 3.

113. History of Ancient Architecture. A description and analysis of the development of the architecture of the ancient East, Greece, and Rome, related to the environmental and cultural setting. I, II; 2. Prerequisite: Architecture 131 or sophomore standing.

131. Architectural Design. Beginning study of architectural planning and designing. Fundamentals of sketching and presentation. I, II; 3. Prerequisite: Architecture 101; registration in General Engineering 108.

132. Architectural Design. Continued study of the fundamentals of architectural design. I, II; 3. Prerequisite: Architecture 131 or consent of instructor.

133. Architectural Design. Continued study of architectural planning and designing; principles of plan, elevation, and section in small buildings. I, II; 3. Prerequisite: Architecture 132.

141. Materials and Methods of Construction I. Wood frame construction as used in houses; manufacture and performance characteristics of materials; framing systems; typical details; finishing materials. I, II; 2. Prerequisite: Registration in Architecture 131.

142. Materials and Methods of Construction II. Non-fire resistance construction; manufacture and performance characteristics of materials; support systems; typical details; finishing materials. Lectures and drawings. I, II; 2. Prerequisite: Architecture 141.

Art

111. Introduction to Ancient and Medieval Art. Cultural analysis of the interrelated fields of architecture, sculpture, painting, and other humanistic studies previous to the Italian Renaissance. I; 3.

112. Introduction to Renaissance and Modern Art. Cultural analysis of the inter-related fields of architecture, sculpture, painting, and other humanistic studies beginning with the Italian Renaissance and continuing through the modern period. II; 3.

115. Art Appreciation. An introduction to the factors inherent in architecture, sculpture, painting, and other arts. Primarily for non-art students. I, II; 3.

181. Freehand Drawing. Simple groups of block form, still life, and casts in pencil and charcoal. Primarily for students in architecture and landscape architecture. I, II; 2.

182. Freehand Drawing. Simple groups for block form, still life, and casts in pencil and charcoal. Primarily for students in architecture and landscape architecture. I, II; 2. Prerequisite: Art 181.

183. Freehand Drawing. Charcoal drawing from the cast; water color. Primarily for students in architecture and landscape architecture. I, II; 2. Prerequisite: Art 182.

184. Freehand Drawing. Charcoal drawing from the cast; water color. Primarily for students in architecture and landscape architecture. I, II; 2. Prerequisite: Art 183.

Biological Sciences

101. Fundamentals of Biology. This course is designed to give a fundamental understanding of plant and animal life and their reproduction. It is not a survey of the plant and animal kingdoms, but is rather a scientific examination of the manner and means whereby plants and animals live and reproduce their kind. Lectures and laboratory. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. Credit will not be given for both Biol. 101 and D.G.S. 131.

102. Fundamentals of Biology, continued. Application of biological principles to the living world. Lectures and laboratory. I, II; 4. Prerequisite: Biol. 101. Credit will not be given for both Biol. 102 and D.G.S. 132.

111. General Botany. A survey of the plant kingdom. The morphology and physiology of representative plants from thallophytes through angiosperms are considered in building up a system of natural classification based upon phylogenetic relationships. The importance of plants in the system of nature and human economics is emphasized. Lectures and laboratory. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Biology 101.

115. Introductory Systematic Botany (Plant Taxonomy). Classification and identification of flowering plants, with special reference to the local flora, and the needs of high school teachers. Occasional field trips required. Lectures and laboratory. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Biology 101 and 111.

116. Economic Botany. Lectures and demonstrations of the uses of plants and plant products by man. The origin and distribution of native and cultivated plants and their relation to human history. Forest, drug, food, textile, beverage and other industrial institutions. Lectures and discussion. II; 3. Prerequisite: Biology 101 and 111.

121. Microbiology. A study of microorganisms and their role in the system of nature. Among the microorganisms are included the viruses and the microscopic multicellular plants and animals, as well as the protozoa and bacteria. Primary emphasis will be placed upon the bacteria. The systematic evolutionary, physiological, and ecological relationships of these organisms with both plant and animal worlds will be considered. Lectures and laboratory. I, II; 4. Prerequisite: Biology 101.

126. Advanced General Bacteriology. General technic, special apparatus and methods. Lectures and laboratory. II; 4. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Biology 101 and 121; credit or registration in Chemistry 105.

131. General Zoology. A survey of the animal kingdom, the phylogenetic relationships of animals and classification. Emphasis is placed upon economically important and parasitic forms. Lectures and laboratory. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Biology 101.

132. Comparative Vertrebrate Anatomy. Classification and distribution of the vertebrate animals. Comparative anatomy of organs and organ systems, their function and evolution. Lectures and laboratory. I, II; 5. Prerequisite: Biology 101 and 131, or Biology 101 with a grade of "B".

136. Bird Study. Native birds; their identification, food relations, seasonal distribution, migration activities, economic importance, and conservation. II; 2.

141. Vertebrate Physiology. The course is designed to furnish an understanding of the basic physiological activities of the vertebrate organism. Lectures and laboratory. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Biology 101.

142. Physiology of the Nervous System. This course is planned to give an understanding of the physiological activities by which the nervous system carries out its function. Recommended as background for students of psychology, education, or biological sciences. Lectures and laboratory. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Biology 101 and 141.

333. Vertebrate Embryology. The development of the vertebrate body and its organs. Lectures and laboratory. I, II; 5. Prerequisite: Biology 101 and 132; junior standing.

Business Law

100. Basic Principles of Business Law. Basic principles of business law, covering the subjects of contracts, sales, negotiable instruments, and agency. Credit toward graduation will not be given for Business Law 201 or 261 in addition to Business Law 100. I, II; 3. Prerequisite: Accountancy 105; Economics 102; forty-five credit hours.

Chemistry

101. General Chemistry. For students who have no entrance credit in high school chemistry, or whose preparation is inadequate for Chemistry 102. I, II; 5. Students with 95 or more credit hours receive only 3 hours credit. Students who have received entrance credit for high school chemistry are given only 3 hours credit for Chemistry 101. Prerequisite: One unit of entrance credit in physics, or 2½ units of entrance credit in mathematics, or credit in Mathematics 103 or 112.

102. General Chemistry. For students who have had one year of high school chemistry. I, II; 3. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: One unit of entrance credit in chemistry or equivalent.

103. General Chemistry. Lectures, recitations, and laboratory. For engineering students who have had no chemistry. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. Students who have received entrance credit for high school chemistry are given only 3 hours credit in Chemistry 103. Prerequisite: One unit of entrance credit in physics, or 2½ units of entrance credit in Mathematics, or credit in Mathematics 111 or 112.

104. Chemistry of the Metallic Elements. Lectures, recitations, and laboratory. Limited to students in the engineering curricula. I, II; 4. Credit in Chemistry 104 will not be granted to students who have received credit in Chemistry 105 or 106. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Chemistry 101, 102, or 103.

105. Inorganic Chemistry and Qualitative Analysis. Lectures, recitations, and laboratory. For students in the ceramic engineering curriculum and for students who are not eligible for Chemistry 104 or 106. I, II; 5. Credit in Chemistry 105 will not be granted to students who have received credit in Chemistry 104 or 106. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Chemistry 101, 102 or 103.

106. Inorganic Chemistry. Metallic elements. For students in the chemistry curriculum and for chemistry majors who are not premedical students. I, II, 5. Credit in Chemistry 106 will not be granted to students who have received credit in Chemistry 104 or 105. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Chemistry 101, 102, or 103.

107. General Chemistry. For students in the curriculum in chemistry or chemical engineering. Lectures, recitations, and laboratory. I; 5. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Excellent high school background in chemistry as shown by a placement examination.

108. General Chemistry and Qualitative Analysis. For students in the curriculum in chemistry or chemical engineering. Lectures, recitations, and laboratory. II; 5. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Chemistry 107.

109. General and Inorganic Chemistry. A course in general chemistry and the chemistry of the inorganic elements and compounds, completing in one semester the work usually taken in two. Open only to those who have had high school chemistry and who graduated from high school in the highest quarter of the class. Students who plan to specialize in chemistry or chemical engineering are advised to register in Chemistry 107 rather than Chemistry 109. Premedical students requiring more than five hours of general-inorganic chemistry are advised to take a two-semester sequence instead of Chemistry 109. I, II; 5. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: High school chemistry; graduation from high school in the upper quarter of the class.

110. Qualitative Analysis. Qualitative analysis of metals and inorganic compounds. Open to all students; required of students whose major is chemistry or chemical engineering and those registered in the curriculum in chemistry except students who qualify for Chemistry 107 and 108. I, II; 5. Prerequisite: Chemistry 106.

122. Elementary Quantitative Analysis. Gravimetric and volumetric analysis, stoichiometrical relations, practical applications. I, II; 5. Prerequisite: Chemistry 104, 105, 106, or 109.

124. Quantitative Analysis. For all students in the chemistry curriculum and chemical engineering. I, II; 5. Prerequisite: Chemistry 109, 110 or satisfactory record in Chemistry 108.

132. Elementary Organic Chemistry. This course does not satisfy the organic chemistry prerequisite for Chemistry 350, 354, or 355. Beginning course in organic chemistry especially for students in prenursing curriculum and in the continuation nursing curriculum. II; 3. Prerequisite: Chemistry 101, 102, 109 or equivalent.

133. Elementary Organic Chemistry. To fulfill the requirements for premedical, predental, preveterinary, dietetics, and home economics students. Lectures, recitations, and laboratory. I, II; 5. Prerequisite: Chemistry 105, 109 or 110.

234. Organic Chemistry. For students whose major is chemistry, or for those registered in the curriculum of chemistry or chemical engineering. I, II; 5. Prerequisite: Chemistry 124.

247. Elementary Physical Chemistry. For premedical students only. Lectures and laboratory. I, II; 4. Prerequisite: Chemistry 122 and 133; Physics 102 or 104, or equivalent.

Civil Engineering

105. Surveying. Use of transit, level, and tape; fundamental surveying procedures and office computations; land surveying. I, II; 2. Prerequisite: General Engineering 101; Mathematics 123.

106. Surveying. Topographic surveying; field astronomy; route surveying; stream gaging; introduction to photogrammetry. I, II; 3. Prerequisite: Civil Engineering 105; credit or registration in General Engineering 111.

115. General Surveying. Use and care of surveying instruments; methods of making engineering surveys; computations of areas and volumes; contour problems; transit stadia mapping methods. I, II; 3. Prerequisite: General Engineering 101 or 104; Mathematics 114.

160. Building Construction. Materials, types of construction, and details for buildings. I, II; 3. Prerequisite: Sophomore standing.

235. Plain Concrete. Production, properties, specification requirements and uses of Portland cement, aggregates, mixing water, and admixtures; proportioning; field practice in the production of concrete; laboratory practice including tests on materials and concrete of various proportions; calculations and graphs based on values from concrete proportioning projects. I, II; 2. Prerequisite: Sophomore standing in engineering, architecture, or landscape architecture.

Economics

100. Introduction to Business. An introductory course on the principles and practices of our economic system from the point of view of the business manager. Open to freshmen only. I, II; 3.

102. Principles of Economics, I. An introduction to the major areas of modern economic theory and public policy—product prices, the firm under varying conditions of competition and monopoly, productive factor pricing. I, II, 3; Prerequisite: One year of college work.

103. Principles of Economics, II. Continuation of Economics 102. Monetary theory, national income theory, and international economics; public policy arising out of the problems of the structure of industry, economic stability, monetary and banking institutions. I, II; 3. Prerequisite: Economics 102.

108. Elements of Economics. A general survey of the operation of the economic system, with reference to the business firm, the determination of price and output, the level of national income and the general price level, the monetary and banking system, public finance, labor relations, and international trade. For non-commerce students only. I, II; 3. Prerequisite: One year of college work.

136. American Economic History. Main events and leading personalities in the economic development of the United States as seen in the westward movement, the growth of industry, agriculture, commerce, finance, transportation, the trust movement, and labor from 1790 to the present. I, II; 3. Open to freshmen and sophomores only.

138. European Economic History. The evolution of the economic institutions of modern Europe in relation to the development of industry, commerce, transportation, and finance in the principal European nations. I, II; 3. Open to freshmen and sophomores only.

170. Elements of Statistics. Methods of collection—presentation and interpretation of quantitative economic data, averages, dispersion, index numbers, reliability of statistics, time series analysis, and simple correlation. Commerce students are required to register in Economics 170; they will not receive credit for Psychology 135, Mathematics 161, or Economics 171. I, II; 3. Prerequisite: Economics 102 or 108; sophomore standing.

Education

101. Nature of the Teaching Profession: An Orientation Course. This course is designed to help the student get answers to the questions: "What does education in its various branches have to offer?" and "What preparation in general education, subject matter fields, and professional education is required or desirable?" Through an extensive testing and counseling program this course is designed to help the student evaluate his potentialities and problems with reference to becoming a teacher. I, II; 2.

109. Educational Psychology. The basic undergraduate course in psychology of education for prospective teachers. Materials and principles from the various areas of psychology (mental hygiene, learning, etc.) are applied to the practical problems of teaching. I, II; 3. Prerequisite: Psychology 100.

Electrical Engineering

114. Wiring and Illumination. Fundamentals of commercial and industrial illumination and wiring practice. Open to architecture and architectural engineering students only. I, II; 3. Prerequisite: Sophomore standing or consent of instructor.

126. Electric Circuits and Fields. Study of units and relations in electric and magnetic circuits and fields. Basic concepts of circuit parameters. I, II; 4. Prerequisite: Physics 107 and Mathematics 143.

English

101. Introduction to Poetry. Understanding of poetry through the reading and discussion of representative poems. I, II; 3. Students with 95 or

more credit hours receive only 2 hours credit. Note: Credit is not given for English 101, 102, and 103 in addition to English 121, 122, and 123. This course, plus English 102 and 103, satisfies the humanities requirement in general education.

102. Introduction to Drama. Understanding of drama through the reading and discussion of representative plays. The reading list includes selections from Greek, Elizabethan, modern English, continental, and American drama. I, II; 3. Students with 95 or more credit hours receive only 2 hours credit. See note under English 101.

103. Introduction to Fiction. Understanding of fiction through the reading and discussion of representative short stories and novels. The reading list includes Jane Austen's *Pride and Prejudice,* Balzac's *Pere Goriot,* Dostoevski's *Crime and Punishment,* E. M. Forster's *A Passage to India,* and Hemingway's *A Farewell to Arms.* I, II; 3. Students with 95 or more credit hours receive only 2 hours credit. See note under English 101.

113. American Literature. Classic American authors before the Civil War: an introduction to Franklin, Poe, Emerson, Hawthorne, Melville, Whitman, and others. I, II; 3. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

114. American Literature. Classic American authors after the Civil War to the present: an introduction to Mark Twain, James, Dreiser, Hemingway, O'Neill, Frost, and others. I, II; 3. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

121. Chief English Writers Before 1800. *Canterbury Tales, Utopia,* two plays of Shakespeare, *Paradise Lost, Gulliver's Travels, Tom Jones, Rasselas.* Particularly recommended for students in professional and technical courses such as law, medicine, commerce, engineering, etc. Credit is not given for English 121 in addition to English 101, 102, and 103. This course, plus English 122 and 123, satisfies the humanities requirement in general education. I, II; 3. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

122. Chief English Writers of the Nineteenth Century. Wordsworth, Byron, Carlyle's *Past and Present,* Arnold's prose and poetry, FitzGerald's *The Rubaiyat of Omar Khayaam,* readings from T. H. Huxley, Browning's poems, and one novel. Particularly recommended for students in professional and technical courses, such as law, medicine, commerce, engineering, etc. Credit is not given for English 122 in addition to English 101, 102, and 103. This course, plus English 121 and 123, satisfies the humanities requirement in general education. I, II; 3. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

123. Chief Modern English Writers. Conrad, Eliot, Joyce, Lawrence, Shaw, Yeats, and others. Credit is not given for English 123 in addition to English 101, 102, and 103. This course, together with English 121 and 122, satisfies the humanities requirement in general education. I, II; 3. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

131. Introduction to Shakespeare. I, II; 3. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

French

101. Elementary Course. Grammar, pronunciation, reading of modern authors, composition, conversation. For students who have no credit in French. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. No credit for graduation is given for French 101 without French 102.

102. Elementary Course. Continuation of French 101. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: French 101 or one year of high school French.

103. Modern French. Rapid reading of modern authors, syntax, and composition. I, II; 4. Prerequisite: French 102 or two years of high school French.

104. Modern French. Continuation of French 103. I, II; 4. Prerequisite: French 103 or three years of high school French.

201. Introduction to French Literature. I; 3. Prerequisite: French 104 or four years of high school French.

202. Introduction to French Literature. Continuation of French 201. II; 3. Prerequisite: French 104 or four years of high school French.

General Engineering

100. Engineering Lectures for Freshmen. Selected topics each week. Required of freshmen in the College of Engineering. I, II; no credit.

101. Engineering Drawing. Lettering; orthographic projection; working drawings; chart and diagram drawings; isometric and oblique drawing; freehand sketching; tracings; methods of reproducing drawings. I, II; 3. Prerequisite: Plane geometry.

102. Engineering Geometry. Theory of projections; solution of theoretical and practical problems involving size, shape, and relative position of common geometrical magnitudes such as points, lines, planes, curved surfaces, and solids; intersections, developments, shades and shadows, perspective drawings. I, II; 3. Prerequisite: General Engineering 101.

107. Architectural Projection. Instrumentation; lettering; projection; intersections; conventions; shades and shadows. I, II; 2. Prerequisite: Plane geometry.

108. Architectural Projections. Shades and shadows; oblique, isometric, and perspective drawings; developments. I, II; 2. Prerequisite: General Engineering 107.

111. Advanced Drafting. For civil engineers. I; 2. Prerequisite: General Engineering 101 and 102, or consent of instructor.

112. General Engineering Technology. For mechanical engineers. II; 2. Prerequisite: General Engineering 101 and 102, or consent of instructor.

203. Aircraft Drafting and Lofting. Aircraft terminology, control and reference surfaces and systems; sheet metal terminology and fabrication; drafting standards and types of drawings; drafting room manuals and standard handbooks; descriptive geometry applied to simple layouts and details; aircraft fastenings; lofting—plane, tapered, and double curved surfaces, airfoils, intersections; practices and standards. I, II; 3. Prerequisite: General Engineering 101 or substantial equivalent.

210. Industrial Production Illustration. Mechanical and freehand drawings in axonometric, oblique, and perspective; shades and shadows; rendering of drawings with various media including some work with the airbrush; industrial production illustration. An approved elective in all engineering curricula. I, II; 3. Prerequisite: General Engineering 102, or 107 and 108.

212. Graphical Calculations. Use of various types of slide rules with special attention to the log-log scales; rectification of curves from laboratory data to devise empirical equations using various types of coordinate paper, construction and use of nomographs or aligning charts. For students in engineering; accepted as an approved elective in all engineering curricula. I, II; 1. Prerequisite: General Engineering 101 or equivalent; Mathematics 123.

Geography

101. Elements of Geography. The geographic point of view; elements of physical landscape; planetary relations, weather, climate, climatic regions, landforms, natural resources. Geography 101 and 111 meet the general education requirement in physical sciences, and Geography 101 and 104 meet the general education requirement in social sciences, in the College of Liberal Arts and Sciences. Lectures and quiz. I, II; 5. Students with 95 or more credit hours receive only 4 hours credit.

104. World Regional Geography. Survey of the geographic structure of the world; regional patterns of settlement and land utilization; man's occupancy of the world. I, II; 3. Students with 95 or more credit hours

receive only 2 hours credit. Prerequisite: Geography 101 or consent of instructor.

105. Introductory Economic Geography. Man's utilization of the major economic resources of the world from the standpoint of geographic patterns. Primarily for commerce students but open to others. I, II; 3. Students with 95 or more credit hours receive only 2 hours credit.

111. Introductory Meteorology. The atmosphere; its composition, functions, and behavior in the production of various weather types; air masses; application to present-day activities. I, II; 3. Prerequisite: Geography 101 or consent of instructor.

114. Conservation of Natural Resources. Elements of the conservation of natural resources (soils, water, biotic, mineral, recreational), with special emphasis given to the general principles of conservation as they apply to the United States. I; 3. Prerequisite: Sophomore standing.

123. Geography of Illinois. Detailed regional study of the state with special emphasis on the cultural relations of Illinois to the rest of the nation. II; 3. Prerequisite: Geography 101, 104, or 106, or consent of instructor.

Geology

101. Physical Geology. Materials, structures, surface features of the earth and processes which have produced them. Lectures, quiz, and laboratory. One-half day field trip required. Geology 101 and 102 meet the general education requirement in the physical sciences. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit.

102. Historical Geology. Evolution of the earth and its life. Lectures and laboratory. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Geology 101 or Division of General Studies 141.

131. Mineralogy. A systematic study of minerals. The nature of minerals as crystalline materials, and their geologic relations are emphasized. Crystal models, crystals, and the common non-silicate minerals are studied in the laboratory. Lecture and laboratory. I; 4. Prerequisite: One semester of college chemistry.

132. Mineralogy. A systematic study of minerals and rocks. The geologic relationships of minerals and rocks are emphasized. The common silicate minerals and the important varieties of rocks are studied in the laboratory. Lecture and laboratory. II; 4. Prerequisite: Geology 131; one semester of college chemistry.

150. Geology for Engineers. I. II; 3. Prerequisite: Sophomore standing in the College of Engineering.

German

101. Elementary Course. Oral practice, reading, and grammar for beginners. Not open to students who have had high school credit in this language. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. No credit toward graduation is given for German 101 without German 102.

102. Elementary Course. Continuation of German 101. Oral practice, reading and grammar. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: German 101 or one year of high school German.

103. Intermediate Course. Modern narrative prose. Oral practice and sight reading. I, II; 4. Prerequisite: German 102, or two years of high school German, or equivalent.

104. Intermediate Course. Continuation of German 103. Classical and modern narrative prose. Oral practice and sight reading. I, II; 4. Prerequisite: German 103, or three years of high school German, or equivalent.

113. Practice in Conversation. Oral practice for the development of elementary skill in conversation and the improvement of pronunciation. This course is supplementary to German 103 and 104. I, II; 2. Prerequisite: German 102 or two years of high school German; registration in German 103 or 104.

210. Masterpieces of German Literature. Introduction to German literature,

in subjects, forms, and ideals. I, II; 3. Prerequisite: German 104, 144, two years of college German, or equivalent.

History

111. History of Modern Western Civilization to 1815. Europe from the age of the great discoveries to the close of the Napoleonic wars. I; 4. Students with 95 or more credit hours receive only 3 hours credit.

112. History of Western Civilization from 1815 to the Present. Development of European nationalism, liberalism, and imperialism; World War; reconstruction. II; 4. Students with 95 or more credit hours receive only 3 hours credit.

131. History of England to 1688. A survey of the political and constitutional, social and economic, church and cultural, and imperial history of the British people from the beginning of English history through the revolution of 1688. I; 4. Students with 95 or more credit hours receive only 3 hours credit.

132. History of England, 1688 to the Present. A survey of the political and constitutional, social and economic, diplomatic and imperial, and cultural history of the British people from 1688 to the present. II; 4. Students with 95 or more credit hours receive only 3 hours credit.

151. History of the United States to 1865. Colonial foundation, the movement for independence, early years of the Republic. I; 3. Prerequisite: Sophomore standing.

152. History of the United States, 1865 to the Present. A century of national life and organizations. I, II; 3. Prerequisite: Sophomore standing.

181. The Ancient World. Ancient empires and Greece. I; 3. Prerequisite: Sophomore standing.

182. The Ancient World. Rome. II; 3. Prerequisite: Sophomore standing.

Humanities

101. Values in Literature. A general education course designed to guide the student to an understanding and appreciation of values in literature, and the relationship between recent literature and the classics. Assigned works are selected to illustrate and clarify problems in literary appreciation. Literary types studied include poetry, fiction, drama, and the film. Credit is not given for Humanities 101 in addition to English 101, 102, or 103. This course, plus Humanities 102, satisfies the general education requirement in the humanities. I; 4.

102. Values in Literature. A general education course designed to guide the student to an understanding and appreciation of values in literature and classics. Assigned works are selected to illustrate and clarify problems in literary appreciation. Literary types studied include poetry, fiction, drama, and the film. Credit is not given for Humanities 102 in addition to English 101, 102, or 103. This course, plus Humanities 101, satisfies the general education requirement in the humanities. II; 4. Prerequisite: Humanities 101.

151. The Heritage of Western Culture. A study of literary masterpieces representing significant contributions to the thinking of the Western world on topics of man's fate and his personal adjustment to life. Credit is not given for Humanities 151 in addition to English 101, 102, or 103. This course, plus Humanities 152, satisfies the general education requirement in the humanities. I; 4. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

152. The Heritage of Western Culture. A study of literary masterpieces representing significant contributions to the thinking of the Western World in relation to the state and society. Credit is not given for Humanities 152 in addition to English 101, 102, and 103. This course, plus Humanities 151, satisfies the general education requirement in the humanities. II; 4. Prerequisite: Sophomore standing or exemption from Rhetoric 102.

Hygiene

101. Personal and Environmental Hygiene. This course or Hygiene 104 is required of all undergraduate men and women during their first year of

residence. I, II; 2. Students with 95 or more credit hours receive only 1 hour credit. Students who expect to take Hygiene 110 should fulfill the undergraduate hygiene requirement by taking Hygiene 104 instead of Hygiene 101.

104. Personal and Community Health. This course or Hygiene 101 is required of all undergraduate men and women during their first year of residence. I, II; 2. Students with 95 or more credit hours receive only 1 hour credit. Students who expect to take Hygiene 110 should take Hygiene 104 (the prerequisite). Hygiene 104 is a more comprehensive course than Hygiene 101 for those interested in a more intensive study of personal and community hygiene. It is especially designed for teachers, coaches, social workers, and others who feel they will need this course in their future professional work.

110. Public Health. Material presented deals with information about community public health problems and the programs designed to prevent disease and promote health education. This is especially valuable for all people who go into health professions or related community work. Field trips and surveys supplement class work. Teachers, coaches, social workers will need this course in their future professional work. I, II; 2. Students with 95 or more credit hours receive only 1 hour credit. Prerequisite: Hygiene 104.

Management

101. Industrial Organization and Management. Organization plans, administrative policies, and management problems with special attention to manufacturing units. I, II; 3. Prerequisite: Economics 102, or 108, or consent of Associate Dean of the college; forty-five credit hours.

Marketing

101. Principles of Marketing. The functions, commodities, and middlemen involved in the marketing of goods and services; the policies and problems involved in the operation of market institutions. I, II; 3. Prerequisite: Economics 102, or 108, or consent of Associate Dean of the college; forty-five credit hours.

Mathematics

101. Basic Mathematics. A systematic presentation of the fundamentals of arithmetic, algebra, plane geometry, trigonometry, and statistics. For Liberal Arts and Science students only. Required of students in the general curriculum of the College of Liberal Arts and Sciences whose entrance credits do not include one year of algebra and one year of plane geometry. II; 3.

102.. Basic Mathematics Continuation of Mathematics 101. I; 3. Prerequisite: Mathematics 101.

103. Introduction to College Algebra. I, II; 3. Students having 1½ entrance units in algebra receive no credit. Students with 95 or more credit hours receive no credit.

104. Elements of Algebra and Trigonometry. For premedical students who have entered with only one unit of high school algebra, and who need credit in trigonometry as a prerequisite to physics. This course does not serve as a prerequisite for Mathematics 123. Premedical students who enter with 1½ units of algebra must take Mathematics 114. I, II; 3. Prerequisite: High school algebra, 1 unit; plane geometry, 1 unit.

106. Solid Geometry. Satisfies deficiency in solid geometry for engineering students; all other students receive full credit. I, II; 3. Prerequisite: Entrance algebra, 1 unit; plane geometry, 1 unit.

108. Elementary Plane Geometry for Veterans. This course deals with the usual topics of high school geometry. It is designed as a refresher course for veterans who are deficient in this area of basic mathematics. Students may meet entrance requirements for the Colleges of Commerce and Engineering through this course. I, II; no credit.

109. Fundamentals of Mathematics. For students who do not specialize in

mathematics. A survey of the character of mathematics as a subject and its relations to science, art, philosophy, and knowledge in general. Mathematics 109 and 110 meet the physical science requirement in general education in Liberal Arts and Sciences. I, II; 4. Prerequisite: Consent of the department.

110. Fundamentals of Mathematics. For students who do not specialize in mathematics. A survey of the character of mathematics as a subject and of its relations to science, art, philosophy, and knowledge in general. Mathematics 109 and 110 meet the physical science requirement in general education in Liberal Arts and Sciences. II; 4. Prerequisite: Mathematics 109.

112. College Algebra. I, II; 3. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: Entrance algebra, 1½ units, or Mathematics 103; plane geometry, 1 unit, or Mathematics 108.

114. Plane Trigonometry. I, II; 2. Students with 95 or more credit hours receive only 1 hour credit. Prerequisite: Entrance algebra, 1½ units, or Mathematics 103; plane geometry, 1 unit, or Mathematics 108.

117. Combined Freshman Mathematics. A combined course integrating all the usual topics of algebra, trigonometry, and analytic geometry, and also some topics of differential calculus. For students of chemistry, chemical engineering, ceramic engineering, ceramics, and architecture. I; 5. Prerequisite: Entrance algebra, 1½ units; plane geometry, 1 unit.

122. Analytic Geometry. Plane and solid analytic geometry. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Mathematics 111 or 112, and 114.

123. Analytic Geometry. Plane and solid analytic geometry. I, II; 5. Students with 95 or more credit hours receive only 4 hours credit. Prerequisite: Mathematics 111 or 112, and 114.

127. Combined Freshman Mathematics. Continuation of Mathematics 117. II; 4. Prerequisite: Mathematics 117.

132. Calculus. First course for students of mathematics and engineering. I, II; 5. Prerequisite: Mathematics 122 or 123.

133. Calculus. First course for students of mathematics and engineering. I, II; 3. Prerequisite: Mathematics 122 or 123.

137. Calculus. For students of chemistry, chemical engineering, ceramics, ceramic engineering, and architecture. I; 3. Prerequisite: Mathematics 117 and 127, or consent of department.

142. Calculus. Second course for students of mathematics and engineering. I, II; 3. Prerequisite: Mathematics 132.

143. Calculus. Second course for students of mathematics and engineering. I, II; 5. Prerequisite: Mathematics 133.

147. Calculus. Continuation of Mathematics 137. II; 3. Prerequisite: Mathematics 137.

161. Statistics. II; 3. Prerequisite: Mathematics 111 or 112; sophomore standing.

345. Differential Equations and Orthogonal Functions. I, II; 3. Prerequisite: Mathematics 133 and 143, or 137 and 147.

Mechanical Engineering

171. Mechanism. A study of the transmission and modification of motion by linkwork, cams, gears, belts, ropes, chains, etc.; theory of gear tooth action; gear tooth systems and production methods; point paths, displacement diagrams. I, II; 2. Prerequisite: General Engineering 101; registration in Physics 107.

182. Manufacturing Processes. Foundry practice; pattern design; hot and cold forming. Welding and allied processes; machine tools and machining practice; use of jigs, fixtures, and tools for manufacture of interchangeable parts. Classroom discussion and demonstrations. I, II; 3. Prerequisite: General Engineering 101, sophomore standing.

183. Materials Casting. Casting as a process of fabrication; the molding process including machine moulding; molding sands characteristics, control, and testing. Melting and pouring practice. Physical characteristics of cast materials, advantages and disadvantages; tray iron structures and elementary metallurgical concepts; design of wood and metal patterns and correlation with foundry practice; core requirements control and testing. I, II; 3. Prerequisite: General Engineering 101 or 104; sophomore standing.

184. Metal Processing. Basic machining processes used for metal processing. Use of machine tools, jigs, fixtures, gages, and measuring instruments and inspection methods to produce interchangeable metal parts. I, II; 3. Prerequisite: General Engineering 101 or 104; sophomore standing.

209. Thermodynamics and Heat Transfer. Thermodynamic analysis of energy transfer and transformation. Properties of simple working substances. Analysis of open and closed systems, direct and reverse cycles, and processes involving transfers of mass and energy. Basic laws of heat transfer. I, II; 3. Prerequisite: Physics 108; Mathematics 142 or 143.

Military Science and Tactics

101. Freshman Basic Drill and Theory. Basic military instruction to include: Organization of the Army and ROTC; individual weapons and marksmanship; and school of the soldier and exercise of command. I; 1.

102. Freshman Basic Drill and Theory. Basic military instruction to include: American military history; and school of the soldier and exercise of command. II; 1. Prerequisite: Military Science 101 or equivalent.

103. Sophomore Basic Drill and Theory. Basic military instruction to include: Map and aerial photograph reading; crew-served weapons and gunnery; and school of the soldier and exercise of command. I; 1. Prerequisite: Military Science 101 and 102 or equivalent.

104. Sophomore Basic Drill and Theory. Basic military instruction to include: Crew-served weapons and gunnery; basic tactics and elementary communications; and school of the soldier and exercise of command. II; 1. Prerequisite: Military Science 103 or equivalent.

205. Junior Advanced Infantry Drill and Theory. Advanced instruction in Infantry to include: Leadership, military teaching methods; maps and aerial photographs; crew-served weapons and gunnery; mine warfare; and school of the soldier and exercise of command. I; 3. Prerequisite: Military Science 104 or equivalent approved by head of department and institution.

206. Junior Advanced Infantry Drill and Theory. Advanced instruction in Infantry to include: Mine warfare; field fortifications; patrolling; tactics of rifle squad; tactics of rifle and heavy weapons platoons and companies; tactics—infantry battalion in attack and defense; and school of the soldier and exercise of command. II; 3. Prerequisite: Military Science 205.

Philosophy

101. Introduction to Philosophy. Discussion of problems in the field of morals, art, and knowledge, with selected readings from philosophers whose views have been influential in Western culture. I, II; 3. Prerequisite: Sophomore standing.

102. Logic. Reasoning, detection of fallacies, evidence. I, II; 3. Prerequisite: Sophomore standing.

105. Moral Ideas and Practice. I, II; 2. Credit is not given for both Philosophy 103 and 105. Prerequisite: Sophomore standing.

Physical Education for Men

101. Prescribed Exercise. Prescribed ameliorative exercises adapted to individual needs, capacities, and interests. I, II; 1.

102. Prescribed Exercise. Prescribed ameliorative exercises adapted to individual needs, capacities and interests. I, II; 1.

103. Prescribed Exercise. Prescribed ameliorative exercises adapted to individual needs, capacities, and interests. I, II; 1.

104. Prescribed Exercise. Prescribed ameliorative exercises adapted to individual needs, capacities, and interests. I, II; 1.

106. Developmental Activities. Activities that contribute to the development and maintenance of physical fitness according to social and hygienic standards. I, II; 1.

107. Beginning Swimming. Skills, knowledge, attitudes, and conditions I, II; 1. Open to non-swimmers.

109. Advanced Swimming. Skills, knowledge, attitudes, and conditions. I, II; 1. Prerequisite: Ability to swim 100 yards.

112. Individual Tumbling Stunts. Skills, knowledge, attitudes, and conditions. I, II; 1.

113. Double Tumbling Stunts. Skills, knowledge, attitudes, and conditions. I, II; 1.

114. Apparatus Stunts. Skills, knowledge, attitudes, and conditions. I, II; 1.

117. Boxing. Skills, knowledge, attitudes, and conditions. I, II; 1.

118. Wrestling. Skills, knowledge, attitudes, and conditions. I, II; 1.

120. Personal Defense Activities. Skills, knowledge, attitudes, and conditions. I, II; 1.

123. Weight Lifting. Skills, knowledge, attitudes, and conditions. I, II; 1.

129. Volleyball. Skills, knowledge, attitudes, and conditions. I, II; 1.

130. Basketball. Skills, knowledge, attitudes, and conditions. I, II; 1.

132. Archery. Skills, knowledge, attitudes, and conditions. I, II; 1.

136. Badminton. Skills, knowledge, attitudes, and conditions. I, II; 1.

139. Backyard Sports. Skills, knowledge, and conditions. I, II; 1.

140. Boating ad Fishing. I, II; 1. Prerequisite: Two hours of credit in physical education and a score on the physical fitness test that allows the student a free choice of activities or approval of the Director of Physical Education.

143. American Square Dance. I, II; 1.

150. Professional Orientation. Introduction to the fields of physical education, athletics, health, safety, recreation. For physical education majors. I, II; 2.

151. Beginning Basketball. Introductory skills, rules and strategy. For physical education majors. I, II; 2.

152. Beginning Football. Introductory skills, rules and strategy. For physical education majors. I, II; 2.

153. Physical Conditioning Program. Physical fitness tests; calisthenics, medicine ball, bulldozer, grass, all-out and locomotor exercises; leadership techniques. For physical education majors. I, II; 2.

155. Gymnastics. Tumbling and apparatus stunts. I, II; 2.

156. Track and Field. Track events and field events; rules. I, II; 2.

Recreation

170. Outdoor Recreational Sports. Soccer, touch football, volleyball, softball, speedball. I, II; 2.

171. Indoor Recreational Sports. Badminton, handball, paddle tennis, squash racquets, table tennis, weight lifting. I, II; 2.

174. Camp Counseling. Objectives, administration, techniques, activity programs, evaluation. I, II; 3.

176. Principles of Recreation. History of leisure and recreation; concepts of play and recreation; major recreation agencies. I, II; 3.

Physical Education for Women

100. Conditioning Activities. I, II; 1.

101. Individual Gymnastics. Recommendation from the Department of Health Service is necessary for registration in this course. I, II; 1.

102. Modified Activities. Prescribed recreational sports, relaxation, and exercise. I, II; 1. Prerequisite: Recommendation from the Department of Health Service.

105. Elementary Rhythms. I, II; 1.

106. Intermediate Rhythms. I, II; 1. Prerequisite: Physical Education for Women 105 or consent of instructor.

110. Elementary Swimming. S; 1.

123. Basketball. I, II; 1.

124. Volleyball. I, II; 1.

125. Softball. I, II; 1.

130. Badminton. I, II; 1.

131. Golf. Personal equipment to be furnished by student. I, II; 1.

132. Bowling. S; 1.

134. Tennis. I, II; 1. Personal equipment to be furnished by student.

135. Archery. I, II; 1.

140. Boating and Fishing. Open to students who have completed two semesters of physical education. I, II; 1.

141. Tumbling and Apparatus Stunts. The side horse, parallel bars, stall bars, buck, etc., are used to develop skills in balance and co-ordination on apparatus. Attention is directed toward safety factors necessary in utilizing this equipment. Forward rolls, backward rolls, group and individual stunts are used. I, II; 1.

142. Ball Room Dance. II; 1.

143. American Square Dance. I, II; 1.

144. Elementary Folk Dance. I, II; 1.

150. Professional Orientation. 1; 2.

151. Body Mechanics, Gymnastics and Hockey. I; 2. For Physical Education majors.

152. Basketball and Softball. II; 1. For Physical Education majors.

153. Soccer, Speedball and Volleyball. I; 1. For Physical Education majors.

154. Tumbling, Apparatus and Tennis. II; 2. For Physical Education majors.

Dance 160. Beginning Contemporary Dance. II; 2. For Physical Education majors.

Dance 236. Folk Dance. II; 1. For Physical Education majors.

Physical Science

101. Introduction to the Physical Sciences. A course designed to meet the general education requirements in physical science. The more important principles of physics, chemistry, geology, and other branches of physical science are introduced and co-ordinated in order to give the non-science student an understanding and appreciation of the field. Credit will not be given for both Physical Science 101-102 and Division of General Studies 141-142. Credit will not be allowed to a student who has credit in general chemistry, physics, or geology. I, II; 4. Prerequisite: Two units of high school mathematics or consent of the department.

102. Introduction to the Physical Sciences. A continuation of Physical Science 101. Credit will not be given for both Physical Science 101-102 and Division of General Studies 141-142. Credit will not be allowed to a student who has credit in general chemistry, physics, or geology. I, II; 4. Prerequisite: Physical Science 101.

Physics

101. General Physics (Mechanics, Sound, and Heat). Lectures with demon-

strations, recitations, and laboratory. For students in arts and sciences, and architecture. I, II; 5. Prerequisite: Mathematics 114 or 117.

102. General Physics (Light, Electricity, and Magnetism). Lectures with demonstrations, recitations, and laboratory. For students in arts and sciences, and architecture. I, II; 5. Prerequisite: Physics 101.

106. General Physics (Mechanics). Lectures with demonstrations, recitations, and laboratory. For students in engineering, mathematics, physics, and chemistry. I, II; 4. Prerequisite: Credit or registration in Mathematics 133.

107. General Physics (Electricity, Magnetism, and Modern Physics). Lectures with demonstrations, recitations, and laboratory. For students in engineering, mathematics, physics, and chemistry. I; 4. Prerequisite: Physics 106; credit or registration in Mathematics 143.

108. General Physics (Heat, Sound, Light, and Modern Physics). Lectures with demonstrations, recitations, and laboratory. For students in engineering, mathematics, physics, and chemistry. II; 4. Prerequisite: Physics 106; credit or registration in Mathematics 143.

341. Electricity and Magnetism. Lectures, problems, and laboratory. This course is fundamental to advanced courses and should be elected as early as possible by those intending to specialize in physics. Fundamental laws logically developed and summarized in Maxwell's equations. Forces and energies associated with electric and magnetic properties of matter. Generation and propagation of electromagnetic waves. I; 4. Prerequisite: General physics and calculus.

Political Science

103. Introduction to Political Science. A course designed to acquaint the student with basic concepts of political science. Topics to be covered will include the following: scope and method of political science; constitutions and forms of government; nature and problems of democracy; the making, control, and execution of public policy. I, II; 3.

104. Introduction to International Politics. This is designed as a survey course. Topics to be covered will include the following: the development of the world system of states; the international political and economic struggle for power; the determination and conduct of foreign policy; problems involved in maintaining peace, and organizations devoted to its maintenance. I, II; 3.

150. American Government: Organization and Powers. Historical development and organization of national, state, and local governments; the federal system; national and state constitutions; civil and political rights; party system; nature, structure, powers, and procedure of legislative, executive, and judicial departments in state and nation. I, II; 3. Prerequisite: Sophomore standing.

151. American Government: Functions. Functions of national, state, and local governments; foreign relations and national defense; taxation and finance; law enforcement; police power; regulation of commerce, communications, and business; promotion of social and economic welfare; current problems. I, II; 3. Prerequisite: Sophomore standing; Political Science 150 or consent of the department.

Psychology

100. Introduction to Psychology. Introductory analysis and description of human behavior with special reference to observation, learning, memory, thinking, emotional life, and personality development. Major emphasis is placed upon psychological principles as they relate to daily life and everyday problems. I, II; 4. Prerequisite: Second semester freshman standing.

125. An Introduction to the Fields of Psychology. An introduction to the basic fields of psychology including the history of psychology, developmental psychology with an emphasis on the socialization of the child, individual differences, industrial, social, abnormal, and physiological psychology. I; 4. Students taking this course may not take Psychology

220 at the Urbana campus for credit. Prerequisite: Psychology 100, or equivalent, or junior standing.

135. Statistical Methods in Psychology. Application of elementary statistical methods to psychological data. No credit for this course will be given to students who receive credit for Economics 170 or Mathematics 161. II; 3. Prerequisite: Psychology 100.

145. Industrial Psychology. A consideration of socio-psychological principles of behavior in business and industry and of the scientific methods of investigation in this area, and a survey of specific methods of personnel technology. II; 3. Prerequisite: Psychology 100.

150. Personality and Human Relations. An introduction to the study of personality in relationship to the social environment. Application of psychological principles to social problems. II; 3. Prerequisite: Psychology 100 or equivalent.

Rhetoric

100. Freshman Remedial Rhetoric and Composition. Open to students who fail the placement test for admission to Rhetoric 101. Intensive review of fundamentals, with considerable practice in composition. Students passing this course will be admitted to Rhetoric 101 without further examination. I, II; no credit.

101. Freshman Rhetoric and Composition. This course provides elementary training and practice in the comprehension and expression of written and oral English. I, II; 3. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: A passing grade on the placement examination or in Rhetoric 100.

102. Freshman Rhetoric and Composition. This course provides elementary training and practice in the comprehension and expression of written and oral English. I, II; 3. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: Rhetoric 101.

133. Expository Writing. I; 3. Prerequisite: Rhetoric 101 and 102; sophomore standing.

144. Narrative Writing. Practice in description, narrative sketches, stories. II; 3. Prerequisite: Rhetoric 101 and 102; sophomore standing.

151. Business Letter Writing. I, II; 3. Prerequisite: Rhetoric 102. This course is not counted toward a major in English.

Social Sciences

111. The Individual in Society. A general education course designed to equip the beginning student with an understanding of the nature and the role of the individual as a member of the several groupings of his social community. I, II; 4. Credit is not given for this course to a student with credit, or concurrent registration, in a course in anthropology, psychology, or sociology. Students with 95 or more credit hours receive only 3 hours credit.

112. Bases of American Life. A general education course designed to acquaint the student with the physical, economic, political, and social developments of the United States and to equip him for intelligent active participation in local and national life. I, II; 4. Credit is not given for this course to a student with credit, or concurrent registration, in Political Science 150 or 151 or History 151 or 152. Students with 95 or more credit hours receive only 3 hours credit.

113. World Patterns and World Problems. A general education course designed to bring the student to an understanding of the geographic, economic, and political bases of the present world situation. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit.

114. The Unity of Knowledge. A general education course designed to acquaint the student with the development of philosophical and scientific disciplines in intellectual history, and to equip him to direct his further general education by his awareness of the integrative factors in current education and culture. I, II; 4. Prerequisite: Sophomore standing and a 3.5 average.

116. Family Living. The development of the family from early to modern times. The factors involved in the establishment and maintenance of a family. Opportunities for individual counseling. I, II; 4. Prerequisite: Sophomore standing or consent of instructor.

Sociology and Anthropology

Sociology

100. Introduction to Sociology. Introductory analysis and description of the structure and dynamics of human society. Special emphasis is placed on the application of scientific methods to the observation and analysis of social norms, groups, intergroup relations, social change, social stratification. I, II; 3. Prerequisite: Sophomore standing.

130. Society and Individual Development. Nature of person and relation to institutions, social order, and development. I, II, 3. Prerequisite: Sociology 100.

140. Social Control. The methods and techniques of group social control of individuals in small groups, societies, and large publics; the innovations in methods of social control resulting from the development of the new mass media of communication. I, II; 3. Prerequisite: Sociology 100, or 104 and 105, or Division of General Studies 151 and 152.

Anthropology

102. Introduction to Anthropolgy: The Origin of Man and Culture. An introduction to and general survey of human origins and early man, physical anthropology, race and racism, linguistics, archaeology and the beginning of human civilization. Recommended though not required to be taken with Anthropology 103 as a survey of the field of anthropology. I, II; 3.

103. Introduction to Anthropology: The Growth of Culture. An introduction to and survey of the development of cultures with special attention to invention, diffusion, adaptation, integration, and other processes of cultural growth as illustrated by primitive and native populations of the world. Recommended though not required to be taken with Anthropology 102 as a survey of the field of anthropology. I, II; 3.

Spanish

101. Elementary Spanish. For students who have no credit in Spanish. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. No credit toward graduation is given for Spanish 101 without 102.

102. Elementary Spanish. Continuation of Spanish 101. I, II; 4. Students with 95 or more credit hours receive only 3 hours credit. Prerequisite: Spanish 101 or one year of high school Spanish.

103. Intermediate Spanish. Rapid reading, review of grammar, composition, conversation. I, II; 4. Prerequisite: Spanish 102 or two years of high school Spanish.

104. Intermediate Spanish. Continuation of Spanish 103. I, II; 4. Prerequisite: Spanish 103 or three years of high school Spanish.

113. Elementary Composition and Conversation. Conducted largely in Spanish. May be taken concurrently with Spanish 103. Does not count toward the major in Spanish. I, II; 2. Prerequisite: Spanish 102 or two years of high school Spanish.

201. Introduction to Spanish Literature. Reading of modern authors of Spain and Spanish America. I; 3. Prerequisite: Spanish 104 or four years of high school Spanish.

202. Introduction to Spanish Literature. Reading of modern authors of Spain and Spanish America. II; 3. Prerequisite: Spanish 201 or consent of instructor.

Speech

101. Principles of Effective Speaking. Preparation and presentation of short informative and persuasive speeches, with emphasis on the selection and organization of material, methods of securing interest and attention, and the elements of delivery. I, II, 3. Students with 95 or more credit hours receive only 2 hours credit. Prerequisite: A passing grade in Rhetoric 101 placement examination or a passing grade in Rhetoric 100.

105. Voice and Articulation. A drill course for the improvement of the normal speaking voice. I, II; 2. Students with 95 or more credit hours receive only 1 hour credit.

107. Parliamentary Procedure. Principles and practice of parliamentary procedure. I, II; 2. Students with 95 or more credit hours receive only 1 hour credit.

111. Business and Professional Speaking. Study, preparation, and presentation of the chief types of business speeches, with special attention to conferences, sales talks, interviews, job applications. I, II; 2. Prerequisite: Speech 101; sophomore standing.

117. Argumentation. Methods of logical analysis; the kinds and forms of argument; the adaptation of argumentative materials to audience situations; and the forms of debate. Practice debates on current subjects. I, II; 3. Prerequisite: Speech 101; sophomore standing.

141. Oral Interpretation of Literature. Principles of interpretation, analysis, and oral reading of prose literature and verse. I, II; 2. Students with 95 or more credit hours receive only 1 hour credit.

161. Fundamentals of Acting. A study of the methods of acting, with emphasis given to basic stage techniques. The role of the character in relation to the play as a whole; the intellectual and emotional values of the play and their interpretation by means of voice and action. II; 3. Prerequisite: Speech 141.

164. Radio Speaking. Preparation and presentation of the chief types of radio speeches, and of the interview, round table, and discussion. Microphone experience. II; 2. Prerequisite: Consent of instructor.

Theoretical and Applied Mechanics

150. Analytical Mechanics (Statics). Resultants of force systems, algebraic and graphical condition of equilibrium of force systems. Analysis of forces acting on members of trusses, frames, etc. Forces due to friction. Centroids. I, II; 2. Prerequisite: Registration in Mathematics 143.

154. Analytical Mechanics (Statics and Dynamics). A combination of Theoretical and Applied Mechanics 150 and 211 with less emphasis on some topics. For electrical engineering students only. I, II; 4. Prerequisite: Registration in Mathematics 143.

156. Analytical Mechanics (Statics and Dynamics). A combination of Theoretical and Applied Mechanics 150 and 211. I, II; 5. Prerequisite: Registration in Mathematics 143.

171. Elements of Mechanics (Statics). Resultants and equilibrium of force systems; conditions of equilibrium applied to trusses, frames, etc.; forces due to friction; centroids; stress and deformation in direct tension and compression; riveted and welded joints; properties of materials. For architects only. I, II; 3. Prerequisite: Mathematics 123.

172. Strength of Materials. Relationships between external forces acting on beams and the stresses produced, shear, moment, slope and deflection diagrams, moment of inertia; columns. For architects only. I, II; 3. Prerequisite: Theoretical and Applied Mechanics 171.

211. Analytical Mechanics (Dynamics). Displacement, velocity, and acceleration of a particle; relation between forces acting on rigid bodies and the changes in motion produced; translation; rotation; plane motion; solutions using the principles of force, mass, and acceleration, work and energy, and impulse and momentum. I, II; 3. Prerequisite: Theoretical and Applied Mechanics 150.

221. Resistance of Materials. Relationships between external forces acting on elastic bodies and the stresses and deformations produced; tension and compression members; members subjected to torsion and to bending; columns, combined stresses; properties of materials. I, II; 3. Prerequisite: Theoretical and Applied Mechanics 150, 154, or 156.

223. Resistance of Materials Laboratory. Tests of steel, cast iron, aluminum alloys, concrete, and wood; determination of such mechanical properties as strength, hardness, ductility, energy, resistance, engineering significance of mechanical properties. I, II; 1. Prerequisite: Registration in Theoretical and Applied Mechanics 221.

The co-operative book store provides for all student needs.

Calendar

Chicago Undergraduate Division

1956—First Semester

Wed., Sept. 5—Wed., Sept. 12 ..... Orientation Period
Wed., Sept. 12—Fri., Sept. 14 ..... Registration
Mon., Sept. 17 ..... Instruction Begins
Wed., Nov. 21, 6 p.m. ..... Thanksgiving Vacation Begins
Mon., Nov. 26, 8 a.m. ..... Thanksgiving Vacation Ends
Mon., Dec. 3 ..... Illinois Day (State admitted to the Union, 1818)
Fri., Dec. 14, 6 p.m. ..... Christmas Vacation Begins
Wed., Jan. 2, 8 a.m. ..... Christmas Vacation Ends
Fri., Jan. 18—Sat., Jan. 26 ..... Semester Examinations

1957—Second Semester

Sat., Feb. 2—Wed., Feb. 6 ..... Orientation Period
Wed., Feb. 6—Fri., Feb. 8 ..... Registration
Mon., Feb. 11 ..... Instruction Begins
Sat., Mar. 2 ..... University Day (University opened 1858)
Thurs., Apr. 18, 6 p.m. ..... Easter Vacation Begins
Wed., Apr. 24, 8 a.m. ..... Easter Vacation Ends
Fri., May 10 ..... Honors Day
Thurs., May 30 ..... Memorial Day
Fri., May 31—Sat., June 8 ..... Semester Examinations

Summer Session 1957

Fri., June 21 ..... Registration
Mon., June 24 ..... Instruction Begins
Thurs., July 4 ..... Independence Day
Fri., Aug. 16—Sat., Aug. 17 ..... Summer Session Examinations

UNIVERSITY OF ILLINOIS

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VERNON L. NICKELL, Superintendent of Public Instruction.....Springfield

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HERBERT B. MEGRAN.....300 W. Front St., Harvard
TIMOTHY W. SWAIN.....912 Central National Bank Building, Peoria 2

Term 1953-1959

CUSHMAN B. BISSELL.....135 S. LaSalle St., Chicago 3
MRS. DORIS S. HOLT.....330 E. Sixth St., Flora
PARK LIVINGSTON.....3600 N. River Rd., Franklin Park

Term 1955-1961

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Warren O. Brown.....Associate Dean of Students
Veterans Counselor
Ann Bromley.....Dean of Women
Harold E. Temmer.....Examiner and Recorder
Paul C. Greene.....Director, Student Counseling Bureau
Earl B. Erskine, M. D.....Director, Health Service
Edward M. Heiliger.....Librarian
Rorert L. Zander.....Assistant Superintendent
of Buildings and Grounds
Robert E. Porter.....Assistant to the Business Manager
Perry L. Smithers.....Manager, Public Relations
Leonard D. Harper.....Personnel Officer

CHICAGO UNDERGRADUATE DIVISION
1955-56

PROFESSORS

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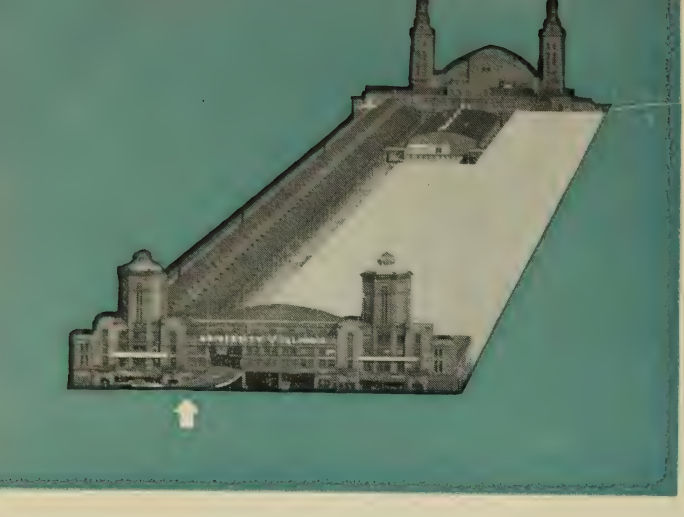

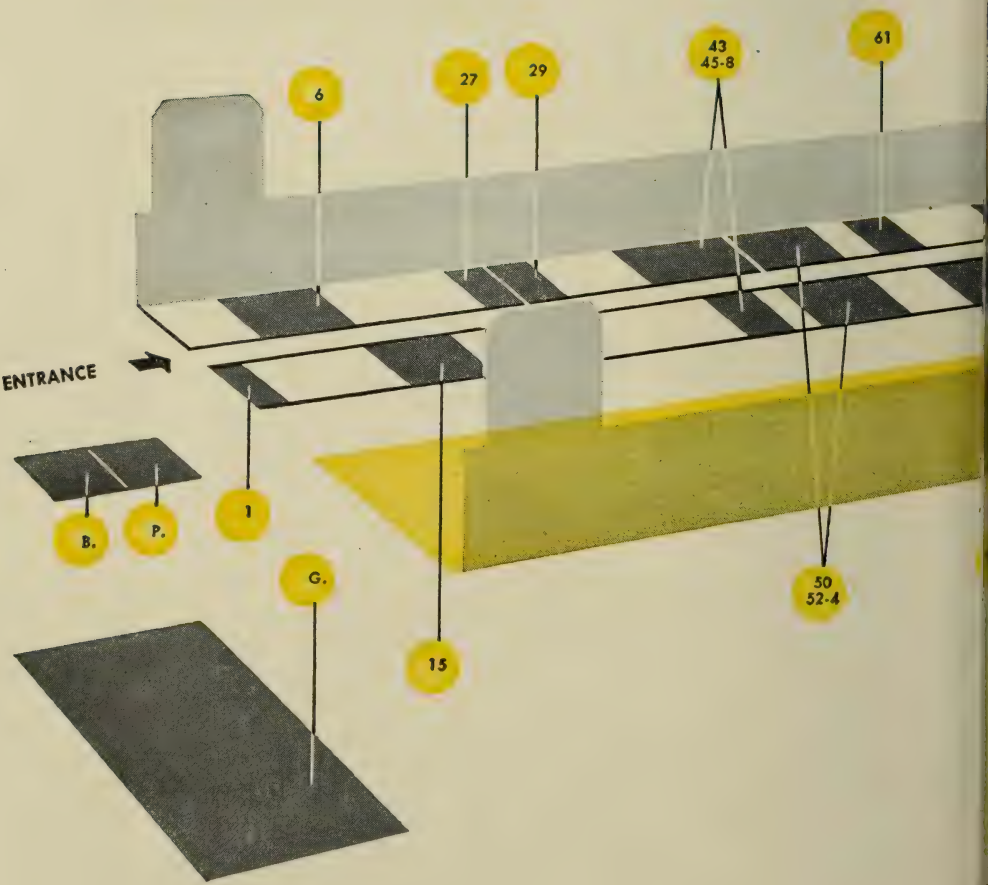
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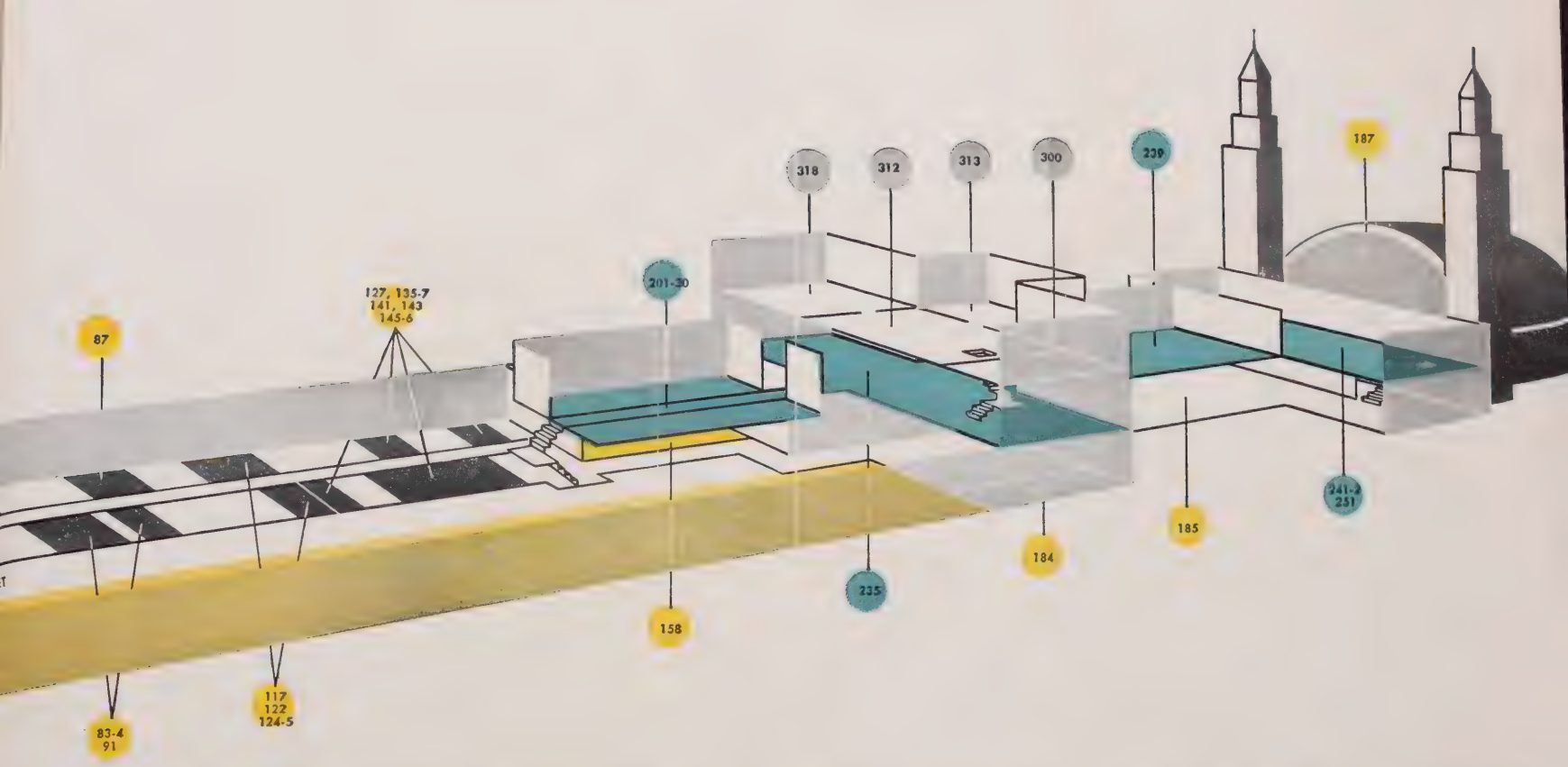

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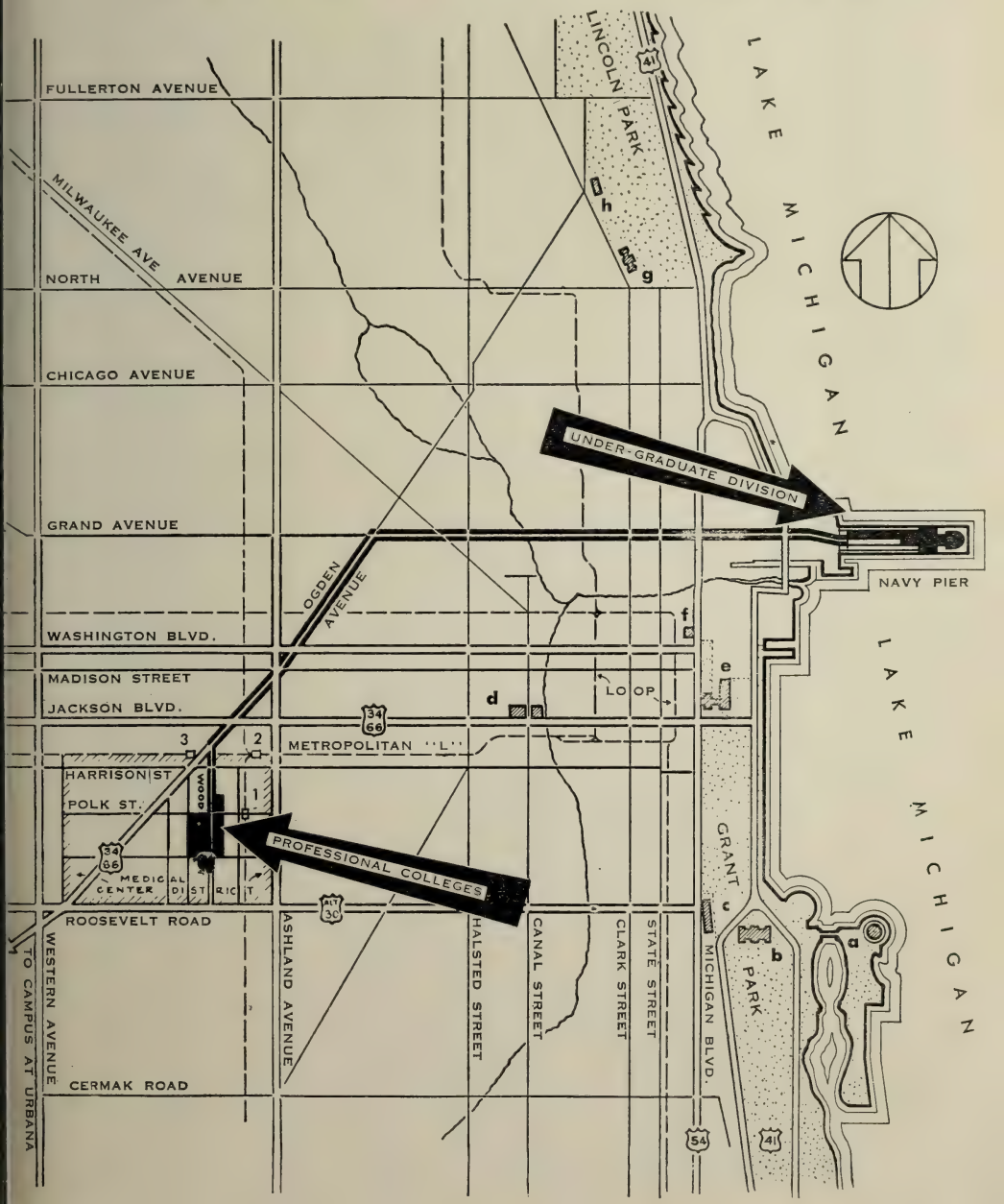
"L" STATIONS 1-POLK STREET 2-MARSHFIELD 3-OGDEN AVENUE, ALL TRAINS TO LOOP, TRANSFER STONY ISLAND STREET CAR.

LEGEND

- **a** ADLER PLANETARIUM
- **b** CHICAGO NATURAL HISTORY MUSEUM
- **c** ILLINOIS CENTRAL R.R. STATION
- **d** UNION R.R. STATION
- **e** ART INSTITUTE
- **f** CRERAR LIBRARY
- **g** CHICAGO HISTORICAL SOCIETY
- **h** CHICAGO ACADEMY OF SCIENCES



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